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Supportive Environments for Active Living?:
A Case Study of Local Government Discourses of the
Built and Social Environments and Physical Activity

A thesis submitted in fulfilment of the requirement for the Degree of Masters of Sport & Leisure Studies at The University of Waikato

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ABSTRACT

Lack of physical activity among New Zealanders is typically regarded as a serious public health concern. Surveys indicate that a considerable proportion of the population fail to engage in even modest amounts. As well as conferring health benefits, leading an active life can help to build social capital, achieve manual tasks, enhance enjoyment, and reduce traffic congestion and pollution. The research of physical activity in New Zealand is, therefore, important. Many factors influence physical activity behaviour, but traditionally there has been a focus on individual-level behaviour-change approaches. In recent years research has started to focus more on characteristics of physical and social environments, such as provision of cycle paths and development of community social cohesion. Concerned by what I observed to be an over-emphasis by New Zealand agencies on encouraging individual behaviour change, I set out to examine the factors that contributed to the shaping of built and social environments, and their effects on population physical activity. Identifying a gap in the research, I examined these factors via a case study of the Hamilton City Council (HCC).

My study employed Foucauldian 'tools' to examine selected HCC documents and interview transcripts with a view to identifying the discourses underpinning local government action with regard to built and social environments and physical activity. In this process I interviewed seven HCC staff members from six relevant departments, including Parks and Gardens, Community Development, and Roading and Transportation. Data was gathered from the staff members using semi-structured interviews, based on pre-prepared guidelines, developed following a review of relevant literature. Relevant HCC strategy and planning documents were selected only after interviews were completed and included their urban design, transportation, creativity and identity and social well-being strategies.

I adopted a Foucauldian perspective to analyse the data because I wanted to examine the phenomena of increased physical inactivity by questioning particular 'ways of knowing' and 'truths'. Such an examination, at the level of local government, could help reveal why some cities are more conducive to active living than others. This theoretical approach helped reveal a number of underpinning discourses, including discourses of economic rationality; the council as nurturer;

safety and surveillance; participative government; and work efficiency. Key discourses of economic rationality and participative government were pervasive in both the interviews and documents, highlighting the degree to which economic considerations and consultative practices dominate local government actions.

My four main findings were that HCC is shaped by and shapes certain discourses; HCC activities are contingent upon many factors outside their control; the creation of supportive environments for active living is a complex task; and, that dominating discourses can silence or obscure other equally valid discourses. These findings gave rise to discursive effects. Firstly, local authority planning, strategizing and action can promote population behaviour control by facilitating resident selfregulation. Secondly, factors outside the control of local authorities can impact on their ability to realise active living goals. Lastly, valid but silenced 'ways of knowing' about physical activity, health, and governance can constrain population physical activity participation. I found that HCC actions were reflective of the discourses identified, illustrating wider societal concerns regarding physical inactivity, obesity, citizenship, economic success, 'democratic' practices, and efficiency. This study contributes to population physical activity research by recognising the value of environmental approaches, but underscoring the need to consider the sources, mechanisms of maintenance, and effects of discourses circulating in local government using appropriate theoretical approaches.

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CHAPTER 1 – INTRODUCTION

...for legislators make the citizens good by forming habits in them, and this is the wish of every legislator; and those who do not effect it miss their mark, and it is in this that a good constitution differs from a bad one. (Aristotle, [1980; 1998 Trans.], p. 29)

Little else is required to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice: all the rest being brought about by the natural course of things. All governments which thwart the natural course, which force things into another channel, or which endeavour to arrest the progress of society at a particular point, are unnatural, and to support themselves are obliged to be oppressive and tyrannical. (Smith, 1755, cited in Bragg, 2006, p. 314)

A stupid despot may constrain his slaves with iron chains; but a true politician binds them even more strongly by the chain of their own ideas...this link is all the stronger in that we do not know of what it is made and we believe it to be our own work...on the soft fibers of the brain is founded the unshakable base of the soundest Empires. (Foucault, 1975, pp. 102-103)

Introduction and personal experiences

The above introductory grace notes provide a taste of some of the themes I will be addressing in this thesis. Aristotle's ideas about the role of governments in shaping behaviours, Smith's views about free market economics, and Foucault's comments regarding subtle political tactics also correspond to the core issues that I have been grappling with for some time in my studies of population physical activity. Thus, in thesis I not only endeavour to answer my research question, but also crystallize my own thinking on the subjects of government, health, economic policy, and population physical activity.

In this chapter I will start by providing some brief sketches of the personal experiences that were instrumental in the formation of my beliefs about physical activity. This thesis is essentially about local government involvement in population physical activity behaviour, and my interest in this area has been shaped primarily by two periods in my life; a brief period in my childhood living in the Netherlands, and a long period in my adult life as an office-bound worker for an insurance company.

When I was 11 years old my parents decided to return to our country of birth, the Netherlands, after a nine year period farming in New Zealand. I was only two years old when we immigrated to New Zealand and therefore had little idea of what living in a small European town would be like. I found that I adapted very quickly and thoroughly enjoyed the contrasts, while at the same time missing some of joys of New Zealand life. I made friends quickly and became delighted by how easy it was to travel to my friends' houses, to school, band practice, and to the local shops. The ease of socialisation also encouraged my involvements in sports and other active pastimes. Suddenly I had become a great deal more independent and was walking and cycling everywhere. I could even safely cycle to all the surrounding towns because of the paved off-road cycle paths. After two years in the Netherlands we returned to New Zealand, where I resumed life on the farm.

At the age of seventeen I started work in an insurance office in Hamilton. This job required me to be seated for most of the day, processing files, and I stayed with the company for the next 14 years. I realised that, from my early childhood years, my personal activity levels had slowly decreased over time. I was active while living on a farm and while living overseas, but when my parents stopped farming and I left school to start work I became increasingly sedentary. This was when I made a conscious decision to try to remain active to combat the combined effects of a sedentary life at home and work. But I also became aware of the various social and infrastructural factors that either facilitated or constrained my efforts to be active in the city, although at that time they remained undeveloped thoughts.

My childhood and adult living and leisure experiences have been varied and contrasting and contributed strongly to my views about the value of active living. On reflection I feel fortunate to have grown up on farms where being active was almost second nature and integral to every day living. Life in a small Dutch town was nothing like being on a farm, but fortunately it was relatively easy to be active there as well. The reason that neighbourhoods were safe and travel easy was undoubtedly

because many people engaged in cycling, motorists looked out for cyclists, and there were many cycle paths to use. My past experiences, therefore, helped me to make conscious decisions about active living in my adult life.

After ending my insurance career I lived in a number of local and overseas towns and cities, including London (England) and Aspen (U.S.A). What struck me was how different they felt as places to live, work, socialise, get around and recreate in. These various urban environments seemed to have their own 'flavour' based on size, the number and size of roads, ease of travel, urban design features and general degree of 'people-orientation'. For example, in Aspen all bus travel within the city-limits was free and walking and cycling was very easy due to a grid-like street pattern, making it easier to walk or cycle directly between two points. Also, there was an abundance of cycle paths, parks and walkways.

My purely subjective observations encouraged me to reflect upon the role of local government authorities and the possible reasons why some places seemed more conducive to active living than others. This project is my attempt to illuminate this issue. The purpose of this chapter, therefore, is to introduce my research. Firstly, I will expand on my personal experiences and focus on my specific area of research. Secondly, I will introduce my research paradigm and research question. I will then discuss the significance of this study, and provide an outline of the thesis as a whole, indicating what I will be presenting in each of the chapters.

Focussing my interest

As indicated above, I enjoyed many years living on farms, and also time living in a close-knit European town. However, when I began work at an office I started to appreciate the need for planned physical activity over and above normal daily activity. I had noticed a sharp drop in fitness and a difference in bodily weight and shape. It was from this point on that I developed a conscious interest in sustainable life-long physical activity behaviour and various active pursuits including going to the gym, mountain-biking, and snowboarding, although it would be another 18 years before I pursued this interest more formally, in an academic manner.

In 2002, I began a Sport and Leisure Studies degree at the University of Waikato and immediately became interested in psychological and sociological aspects of sport and physical activity. I learned that, like other Western countries, New

Zealand had been building its focus on population fitness and physical activity since the 1970s, culminating in more intense social marketing campaigns following the release of the U.S. Surgeon General's report (U.S. Department of Health and Human Services [USDHHS], 1996). I became interested in the various discussions about the problem of population physical inactivity, along with the more sensationalised problem of population overweight and obesity. I continued to be interested in these broad areas and for my Honours year I focussed on workplace health promotion (Ryks, 2005).

After completing my Honours dissertation I secured a job in workplace health promotion but quickly realised that I was philosophically opposed to many aspects of the work. Although I tried to focus on some of the key social and environmental issues that were perhaps contributing to inactivity, I found that these were invariably going to be costly or impossible to influence, from the perspective of the individual employer. But primarily, I was not convinced that approaching workplaces with a view to encouraging their employees to change their lifestyles was going to be either useful or effective in the long term. It was during this time that my interest in the impact of built and social environments on physical activity behaviour became reignited. This had been an area of interest in my final years of tertiary study and I recalled the many debates about the root causes of physical inactivity; whether they lay within the person or more society-wide, or a combination. So, after setting up the workplace health programme I resigned and enrolled in a course of Masters Study to follow my interests.

Having reviewed all my life experiences and preferences in terms of University study literature, I focussed my attentions on social and environmental influences on physical activity. Due to the highly urbanised nature of most Western countries, including New Zealand, my attention turned to cities, and I began to wonder why and how some seemed to work harder at creating activity-friendly environments than others. My intrigue led me to focus on the urban landscape, on urban planning, roading infrastructure and expenditure, city governance, inter-agency collaboration, and the various motives for action. It also steered me towards a way of thinking about local government power relations and their effects, and ultimately led me to commence this study.

My research paradigm and general research question

As intimated above, over time I have become interested in political and economic developments in the social world and their implications, at the local level, for population physical activity, or active living support. My decision to investigate the workings of local government was therefore influenced by the way I view and understand knowledge and social reality. While I will be discussing my methodology in Chapter Three, I feel it is important to introduce my ontological and epistemological positions from the outset. My views about the nature of reality and knowledge, and therefore research paradigms, have developed over time as a result of engaging in tertiary studies, reflecting on personal life experiences, and through discussions with lecturers and fellow students. The preferences I have developed are widely shared but by no means without critics. In this chapter I will not seek to justify my views, nor will I critique differing or opposing ones.

Sparkes (1992) describes in detail the essence of various research paradigms and I have drawn on his work to describe my own views. My position is that reality, especially with regard to complex and dynamic human behaviours such as physical activity, is a product of human consciousness, and that knowledge is subjective and based on personal experiences and insights (Sparkes, 1992). According to Berger and Luckmann (1966), knowledge, as a mirror of reality, has been replaced by a conception of the social construction of reality, with a focus on the interpretation and negotiation of meaning of the social world. Research that focuses on the social world and various versions of reality foregrounds language and discourse as tools for constituting knowledge.

Consistent with my world view, I situate myself within the critical/interpretive paradigm. A feature of research in this paradigm is the desire to understand the multiple perspectives of participants through the collection of rich in-depth data (Locke, Silverman, & Spirduso, 1998). Critical/interpretive research aims to understand the social world and any power imbalances by gaining in-depth and first-hand knowledge of the subject (Sarantakos, 1998; Sparkes, 1992). My critical leanings are in part due to my concern about the apparent disregard by interpretive researchers of macro-environment forces (Sparkes, 1992). Having said this, I do not intend to interpret data on the basis of a 'knowing subject', but to look beyond the individual and examine various ways of talking that lead to the production of

knowledge (Prior, 1997). By identifying knowledge-producing 'discursive practices', I can reveal various forces that contribute to the shaping of built and social environments and physical activity behaviour.

I clearly believe that behaviour can be shaped by physical and social environments, but I also believe that, given the right tools, people can take control of their lives to some extent. There seems to be a delicate balance between social constructions of reality and agency and I am sympathetic with critical theorists who emphasize that meaning-making processes take place within social and organizational contexts permeated by unequal power relations. As Sparkes (1992) notes, "social reality is not constructed in a free and voluntary process since negotiations are shaped by particular organizational relations, structures and conditions" (p. 39). However, I also disagree that power operates in a 'top-down' fashion and is mainly oppressive. I believe that power can be productive and that there are opportunities for resistance. Such an understanding of power was developed by the French philosopher *Michel Foucault*.

In this thesis I adopt a Foucauldian view of language and discourse that concentrates on the power relations evident in particular social relations and texts and the effects that may result. Foucault has been described as a sociologist and historian of knowledge (Potter, 1996) and it is his fundamental curiosity with the development of particular ways of knowing over others that draws me to his work. Cole, Giardina and Andrews (2004) introduce Foucault, as many have done, as a historian of the present, noting that:

...he sought to undermine modern vernaculars by disrupting the certainties that govern contemporary ways of thinking. Foucault's interventions encourage us to detach from established knowledge, ask fresh questions, make new connections, and understand why it is important to do so. (p. 207)

According to Gergen and Gergen (2003), Foucault's most important contribution was that he linked the construction of truth with the emergence of power and control. Determining the various 'truths' circulating at local government level could help reveal why some cities are more conducive to active living than others.

Foucault's reconceptualising opens up new ways of approaching issues such as population physical activity, which may otherwise languish due to narrow thinking and unquestioning theories. Population physical activity is influenced by the construction and maintenance of certain truths, leading to real effects for city residents. While I agree that meanings cannot always be controlled in individuals (Markula, Grant, & Denison, 2001), the study of discourses and texts using Foucauldian tools may highlight complex power relations between individuals and groups and explain decisions and actions in terms of the built and social environments and the consequences for population physical activity behaviour.

Hamilton City and the Hamilton City Council

In view of my research paradigm, I decided to undertake a case study of the Hamilton City Council. My aim is to reveal the discourses, relating to built and social environments and active living, underpinning decision-making at the level of local government. In this section I provide a brief overview of the city and the council for contextual purposes. I have lived, studied and worked in Hamilton, intermittently, since 1980 and believe it is a good choice for a case study because of its relatively small population of 134,000 (est. 2006) and recent rapid growth rate. Hamilton is New Zealand's largest inland city and 4th largest urban area, after Auckland, Wellington, and Christchurch. Its population grew by 12.5 per cent during the period 2001-2006, compared with the national growth rate of 7.8 per cent, and it is projected to grow by a further 34.2 per cent over the period 2006-2026 (HCC, 2007b). This means the council needs to cope with growth pressures, including the provision of support and opportunities for active living, now and into the future.

Not only is Hamilton one of New Zealand's fastest growing cities, it is also one of the most youthful, with around half of the residents under 30 years of age (HCC, 2003; 2007b). Initially an agricultural service centre, the city now has a growing and diverse economy, is home to world class agricultural research facilities, and two tertiary education institutions. The Waikato river flows through the city, it has a mild climate, 135 parks and gardens, 70 children's playgrounds, 58 sports areas, and over 1,000 hectares of open space (HCC, 2003; 2007b; 2007c). Because of its largely flat or gently undulating contour the city is ideal for walking and cycling, or activities in any of its parks. Hamilton city has an extensive walkway system and the

Council has pledged to support walkers and the concept of a 'walkable city' by becoming a signatory to the International Charter for Walking.

There is, however, a history of concern about supportive environments for active living in Hamilton, especially in terms of cycling. Vaughn's (1979) study of Hamilton resident cycling patterns indicated a degree of public concern since the 1960s and found widespread support for facility and cycle lane construction. Further studies by Bielby and O'Sullivan's (1995) and Gabites Porter Consultants (1997) concluded that the provision of safer facilities such as cycle lanes was warranted, along with an overall focus on engineering, planning, and education to support active behaviour.

The Hamilton City Council is charged with managing roading, transportation and land-use as well as community development, parks and gardens, safety, and leisure facilities. These are urban design and management elements that can impact on active living opportunities in terms of provision, safety, access, funding, investment, and ease of use. Although the Council invests in riverside walkways, on-road cycle lanes, parks and playgrounds, it has had to manage rapid private sector suburban development and a population surge.

Conducting a case study of the HCC is valuable because the city has an ideal topography for outdoor active living therefore making it an ideal urban setting for population physical activity efforts. The HCC, like any other New Zealand local or regional authority, must grapple with the complex task of working with various stakeholders and pieces of legislation to ensure community well-being. As such, a case study would be useful to the HCC and other city, regional and district councils in New Zealand because it would help develop an understanding of the various influencing factors involved in population behaviour change initiatives.

I have, therefore, decided to focus on the influence of underpinning discourses on actual HCC policies and practices to determine to what extent decisions regarding built and social environments are supportive of active living. For this thesis I was particularly interested in support for activities other than organised sport or other commodified, planned activities. This type of support could make it easier for residents to value physical activity experiences and integrate them into daily living. Consequently, my research question seeks to identify the discourses that underpin local government planning, decision-making and action with regard to built and social environments for active living.

Significance of the study

This study has the potential to offer key insights relevant to a number of groups. Firstly, there has been a lack of research that has sought to understand local government actions relating to population physical activity, despite there being a burgeoning body of research on the relationship between built and social environmental factors and physical activity behaviour. Cities and towns vary greatly in their street design, aesthetic feel, amount of green and open space, and urban design features. Some seem to be more supportive of active living than others, with more 'people-friendly' features such as wide footpaths, meeting places, and areas inaccessible to motor vehicles. This study will point to some of the reasons why these differences exist. It will also highlight the complexities of actually changing or designing environments to promote active living, even where research outlining the necessary steps is unanimous.

The studies that have examined built and social environments have focussed mainly on measurable associations between variables. These are valuable studies in their own right and form part of the basis for my rationale for this study. However, they focus mostly on relationships between variables whereas I have decided to focus on how these environments are shaped in the first place and what forces continue to shape them. A key driver behind this study is my belief that there has been an overemphasis by various New Zealand agencies on encouraging personal behaviour change without adequately examining the social and environmental contexts of inactivity. There has also been a strong emphasis on the physiological health effects of regular physical activity, which I believe is overshadowing many other intrinsic qualities and benefits of activity, such as promoting a sense of achievement, enhancing social contacts, and appreciating ones surroundings. While not always possible, I have aimed to focus on a wide variety of physical activity effects, not just bodily health.

My study is also significant because I have drawn on a number of research disciplines to develop and design my approach. My work is therefore likely to be of interest to scholars and practitioners from diverse areas such as sport and exercise science, public health, transportation, urban planning and geography. I believe I am adding to the extensive literature in these areas by taking a novel approach through my theoretical position. Although a great deal is known about various behaviour

change techniques and associations between environments - or perceptions thereof - and behaviour, little is known about the political climate and driving forces at local government level. It would be useful to know about these matters simply to reveal some of the complexities of environmentally based behaviour change, and to also consider the implications of what some might consider population behaviour control.

Lastly, my study will be significant for the Hamilton City Council in that it highlights findings and conclusions that are specific to the organisation and may be considered informative and useful. Promoting active living may be a difficult and controversial task for councils, requiring tact and perseverance when dealing with various stakeholders, including rate-payers. Some of this difficulty may be lessened with a better understanding of the effects of particular ways of knowing about physical activity. This study may also be of use to other local government authorities who are interested in creating active communities in their cities or areas. Although this is a case study, it may be possible to generalise the findings and conclusions to other locations, although this is not my specific aim.

Outline of thesis

This thesis consists of seven chapters, beginning with a review of literature in which I present information from scholarly research, relevant books and various agency publications relevant to the topic of study. Mainly, I examine studies linking built and social environments to physical activity behaviour and argue that much could be gained from examining local government authorities. This leads me to my research question and rationale. Following this, in chapters three and four, I discuss my theoretical approach and methods respectively, explaining the Foucauldian 'tools' I have employed and the qualitative nature of my data collection and analysis. I also present some of the ethical concerns and limitations of this study. In Chapters Five and Six I detail and discuss my findings that resulted from my data analysis process, focussing on official HCC documents and semi-structured interviews, respectively. Within these chapters I present discussions on the various discourses I identified and power effects evident. Throughout these two chapters I incorporate excerpts and statements from the documents and interviews to illustrate my points and draw upon theoretical concepts to illuminate their broader meaning and connect them to the literature. In my last chapter I conclude by presenting the main points of the study and discuss some implications, suggestions and recommendations for the future, which I have arrived at through careful consideration.

Summary

In this chapter I have introduced my study by discussing some of my life experiences and explaining how they influenced my approach to the study of active living. I also explained how I developed an academic interest in this specific thesis topic, and outlined my research paradigm and general research question. I then detailed the various reasons why the study is significant, and provided an outline of the remainder of the thesis.

CHAPTER 2 – A REVIEW OF LITERATURE

Introduction and conceptual overview

In this chapter I review literature relevant to population physical activity, built and social environments, and local authority governance. I begin by providing a conceptual overview for this study and discuss some of the basic concepts of physical activity, active living, health, and individual behaviour change. Following this, I review the relevance of public health for population physical activity. Next, I detail the mostly international research on the relationships between built and social environments and physical activity. This is followed by a discussion on the role of local government in health and physical activity matters, in which I stress the political factors and power relations that come into play. Lastly, I explain the focus of my study by setting out my research question and providing a rationale for this study.

Through this review I will illustrate the importance of local government in shaping environments that play a vital role in influencing physical activity behaviour. Although major organisations, such as the World Health Organization, recognise the importance of the built and social environment, few have looked at local government decision-making processes and practices. Through this review I will show that the examination of the workings of local government, and the power relations between various urban stakeholders, is a key area for population physical activity research and intervention. I start by introducing the key terms and concepts I use throughout the thesis, and review some of the dominant theories, ideas, and techniques of population physical activity behaviour change.

The U.S. Surgeon General's report defines physical activity as: "Bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure" (USDHHS, 1996, p. 21). Engaging in regular physical activity can protect against numerous diseases and conditions, increase longevity, help with weight control, enhance psychological states, and contribute to social and economic prosperity (Astrand, Rodahl, Dahl, & Stromme, 2003; Biddle, Fox, Boutcher, & Faulkner, 2000; Edwards & Tsouros, 2006; Hardman & Stensel, 2003; USDHSS, 1996). In New Zealand, 'insufficient physical activity' is said to account for more than 2,500 deaths per year (Ministry of Health [MOH], 2005) while in the

United States the yearly cost of direct health care delivery attributable to population-wide sedentary behaviour has been estimated at US\$24.3 billion (Colditz, 1999).

Although a regularly active population can deliver many benefits to individuals and societies, it is important not to over-romanticise physical activity. Some negative consequences can occur in the form of sport or exercise injuries, sudden or gradual medical and psychological conditions, and violence in sport (Hardman & Stensel, 2003; Pringle & Markula, 2005; Szabo, 2000; White, Young, & Gillett, 1995). In New Zealand almost 25,000 people were injured playing sport – including 96 deaths - in the 2006/07 year, with the Accident Compensation Corporation (ACC) paying out NZ\$69 million - up 58 per cent from two years ago - to treat people who hurt themselves taking part in New Zealand's top 10 sports (Kiong, 2007). In contrast, physical inactivity may provide useful stress relief from work or family pressures, provide physical recovery time for sedentary workers with active leisure lives, or sedentary leisure time for those with active work lives.

Despite the overarching view that the benefits of physical activity outweigh the costs, the number of inactive¹ adult New Zealanders has been surveyed at 32 percent (Sport and Recreation New Zealand [SPARC], 2003). For children and young people the level of inactivity has increased from 26 per cent in 1997 to 38 per cent in 2001 (SPARC, 2003). To combat these low levels of activity simple population guidelines were adopted in New Zealand following the release of the U.S. Surgeon General of 1996. The guidelines are that adults should accumulate a minimum of 30 minutes of moderate intensity physical activity on most, if not all, days of the week (USDHHS, 1996). This represents a shift to an activity-for-health approach (Markula, 1997; Wetter, Goldberg, King, Sigman-Grant, Baer et al., 2001). Efforts to encourage New Zealanders to be more physically active have mainly occurred through the *Push Play* social marketing campaigns (SPARC, 2003) which include techniques such as television advertisements and local Sports Trust patient-counselling initiatives.

Social marketing efforts to encourage population-wide physical activity are not new. In Canada, the *Lalonde* report of 1974 changed the personal health focus from medicine to 'lifestyle' changes (Minkler, 2000) and in 1988 the government started to focus on 'active living', launching an official campaign in 1992. Active

¹ Being inactive in this study meant taking part in less than 2.5 hours of leisure-time physical activity in the week prior to survey, while sedentary meant taking part in no leisure-time physical activity in the preceding four weeks (USDHHS, 1996).

living is defined as a way of life in which physical activity experiences are valued and integrated into daily living (Hunter, 1992) and has a strong focus on health outcomes. Health is commonly considered a condition with physical, social, and psychological dimensions, not simply the absence of disease (Bouchard & Shephard, 1993) and should be considered a resource for everyday life, not the object of living (World Health Organization [WHO], 1986). Physical activity, active living and health come together in what Kirk and Colquhoun (1989) call the 'exercise = fitness = health' triplex, promoting the health benefits of exercise, but also producing powerful notions of individualism and personal discipline. As we will see, such discourses of individualism underpin many HCC policies and strategies.

Despite the recognition of social and environmental factors that can influence physical activity behaviours, the predominant push has been to encourage individuals to change their lifestyles. Consequently, most of the theories developed and interventions implemented have focussed on individual behaviour change. However, these theories and interventions have proven to be only marginally successful (King, Jeffery, Fridinger, Dusenbury, Provence, Hedlund, & Spangler, 1995; Sallis, Cervero, Ascher, Henderson, Kraft, & Kerr, 2006; Wetter et al., 2001), but continue to be used nonetheless. The trans-theoretical model of behaviour change (Proschaska & DiClemente, 1983), for example, is widely applied, including in New Zealand for the Green Prescription patient exercise counselling initiative (Pringle, 1998). The emphasis on 'lifestyle change' to prevent disease may promote the idea that poor health is the result of personal failure and ignores the important connection between behaviour and social norms and rewards (Tesh, 1981). Therefore, failures to address factors in social and physical environments that maintain and reinforce unhealthy behaviours can be said to support a victim-blaming ideology (McLeroy, Bibeau, Steckler, & Glanz, 1988).

Increasingly, there have been calls to divert research and practice attention towards holistic, ecological and policy approaches, and to develop a trans-disciplinary paradigm to understand and influence physical activity behaviour (Bauman, Sallis, & Owen, 2002; King, Stokols, Talen, Brassington, & Killingsworth, 2002; Owen, Leslie, Salmon, & Fotheringham, 2000; Saelens, Sallis, & Frank, 2003; Wetter et al., 2001). Various researchers sum up the rationale for this change of direction by pointing out that enduring social and environmental factors will inevitably bring about the return to previous inactive behaviour once targeted personal level interventions

have ended (see, for example, Spence & Lee, 2003; Syme, 1996). In other words, if wider social and environmental factors are not addressed then individualised behaviour change efforts will at best have temporary effects. A discipline that has long recognised the importance of these wider environmental forces has been that of public health.

Public health and physical activity

Many examples of changes in behaviour and improvements in living conditions, due to changes in the wider environment, can be found in public health. Although the motives for, and determinants and benefits of being physically active are many and varied, the link with health remains strong. Health, in a broad sense, is often regarded as the main benefit of regular activity, even though people may cite quite different motives and personal benefits. For example, it is likely that people engage in activities such as dancing, skateboarding, or gardening primarily for reasons other than improving health. However, it seems that when such pastimes are categorised as types of physical activity they seem to automatically take on a health component. Due to the prominence of health enhancement as an outcome of physical activity, a review of the history and role of public health is useful.

Much of the decline in mortality and morbidity in Western cities in the last two centuries has come about as a result of improvements in water supply, sanitation, housing, and food quality (Frank, Engelke, & Schmid, 2003). These types of public health initiatives were introduced and developed universally for the 'public good' to prevent disease and promote healthy urban communities. Indeed, changes brought about by advances in aetiology in the early 19th century gave rise to 'social medicine', which revised many ideas about causation.

Rudolf Virchow was one of the pioneers of 'social medicine'. Practising in the 1840s, he went beyond traditional diagnosis by pronouncing the causes of certain outbreaks of disease to be wider social matters such as poverty, and the lack of education or democracy (Rosen, 1974; Waitzkin, 2006). For example, in his study of the 1848 typhus epidemic in Upper Silesia, Virchow argued that inadequate social conditions made the population more susceptible to other causal factors such as climate and infectious agents, leading to the outbreak. He wanted to point out that

these conditions were entirely 'man-made' and avoidable, and furthermore that diagnoses were often too simplified, obscuring inequities.

Physical inactivity is not an epidemic disease like typhus. It is, however, a widespread behavioural phenomenon in many Western (and some Eastern) countries, with health consequences as previously described, and complex causes rooted in Western development. Interestingly, Western communities that have not embraced modern technologies and practices, such as the old order Amish, show very high levels of physical activity and low levels of obesity (Bassett, Schneider, & Huntington, 2004). However, these types of communities are a small minority, and public health authorities clearly have a role to play in promoting active living in Western societies. People employed within the sub-discipline of health promotion are most commonly involved in such work.

Health promotion can constitute any planned combination of educational, political, environmental, regulatory, or organisational approach that supports the healthy living of individuals, groups, and communities (Cottrell, Girvan, & McKenzie, 2006). The *Ottawa Charter for Health Promotion* (WHO, 1986) identified five areas for worldwide health promotion action, one of which was to create supportive environments for health. Creating supportive environments means protecting natural and built environments, and ensuring that work, leisure and living environments are a source of health for people (WHO, 1986). In terms of the urban environment, the WHO recognised the potential of supportive environments by launching its *Healthy Cities* project in 1986, a project that helps participating cities to develop and implement plans to create health promotion policies, programmes, and environmental conditions (Ashton, 1991). Therefore, supportive environments are those that help to make healthy choices easy choices, and are developed by working to change policies that impact on health (Naidoo & Wills, 2001).

In terms of physical activity promotion, "a supportive environment would be one in which members of the target population could freely achieve and maintain a physically active lifestyle" (USDHHS, 1999, p. 118), and would include such features as good social networks, safe physical conditions, and political infrastructure, while removing real or perceived barriers (USDHHS, 1999). The determinants of physical activity are illustrated by a simple WHO diagram (see Figure 1). Individual level factors, such as motivation, can be influenced by macro and micro environmental forces, such as the person's immediate physical and social environments. Clearly,

health promotion is more than personal level education or encouragement, and yet the focus, in terms of practice, seems to be on the empowerment of individuals (Pringle, 1998).

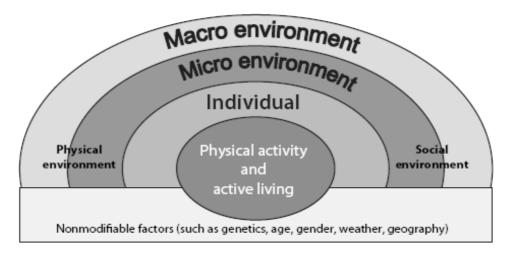


Figure 1. Determinants of physical activity (Retrieved June 6, 2007, from: http://www.euro.who.int/document/e89490.pdf)

Health promotion has also been criticised for being too focused on the individual (Gard & Wright, 2005; Gillick, 1984), having a poor cost-benefit ratio (Becker, 1993), enhancing managerial control in the workplace (Goss, 1997), and for failing to nurture empowerment (Grace, 1991). Similarly, the active living 'movement' has been criticised as a state solution to the problem of inactivity, used for political ends (Bercovitz, 2000), and an empty slogan (Bouchard, 1994). These criticisms highlight people's varied experiences of health promotion efforts and are a reminder of the need to define problems adequately and consider unintended consequences before launching into interventions.

If health promotion has a role in preventing inactivity one place to begin is the difficult area of wider environmental change. King et al. (1995) agree and note that: "Public health policies that invoke 'passive' intervention are often more successful in achieving population-wide changes than those requiring active decision making by individuals" (p. 501). Health promoters may therefore be able to better influence population physical activity levels by working with planners, urban designers, and other city officials (Day, 2006). Many believe that the time is right to renew and reinvigorate collaborations between public health and urban planning (Jackson & Kochtitzky, 2001; Northridge, Sclar, & Biswas, 2003; Sturm, 2005). Physical activity focussed health promotion efforts, guided by the *Ottawa Charter* or subsequent

charters would, in summary, benefit from reviewing past population health successes that targeted wider environmental factors. Having illustrated the potential of developing supportive environments I will now examine the various built and social elements of urban environment and discuss their relationships to physical activity behaviour.

The case for environmental influences on active living

In this section I will review selected studies that have examined relationships between built and social environmental factors and physical activity behaviour. For the purposes of this chapter the built environment can be defined as "land-use patterns and all buildings, spaces and elements that people construct or modify" (Edwards & Tsouros, 2006, p. 5), including parks, recreation areas, roads and transport systems. I will review the various elements of the built environment in turn by focussing on urban design and planning, urban sprawl, roads and transportation, open spaces, and sustainable development.

Along with built environments, social environments combine to make up the 'behavioural setting' of individuals (Sallis, Bauman, & Pratt, 1998). McElroy (2002) defines social environments as "non-physical products of human interaction" (p. 29), including shared group ideas and the ways groups come together to participate in activities. However, I also include socio-economic elements such as income and employment status and will review the relationships between physical activity and social connectedness, social capital, socioeconomic status, and sense of community. These analyses build a case for supporting environmental change, a case that I examine more closely in Chapters Five and Six.

The built environment

A great deal of recent research and discussion has been directed toward the questions of if and how the built environment influences physical activity and health (see, for example, Frank, Engelke, & Schmid, 2003; Handy, Boarnet, Ewing, & Killingsworth, 2002; Jackson & Kochtitzky, 2001). The U.S. Transportation Research Board (TRB) recently conducted a comprehensive examination of the evidence calling on experts from various disciplines to determine whether decentralized and largely automobile-dependent development patterns were contributing to increasingly

sedentary lifestyles (TRB, 2005). In general terms they found that the built environment can facilitate or constrain physical activity but that the association between the two is very complex. Indeed, they found few studies showing a direct causal relationship. Nevertheless, because the built environment has been shaped by longstanding policies and by the practices of planners, developers, policy makers and traffic engineers (TRB, 2005) these policies and practices must be continually scrutinised for their possible effects on behaviour. This is particularly important due to the relative permanence of many features of the built environment.

The knowledge that the built environment can influence activity is common among various central government agencies in New Zealand. Some note this broad influence in strategy documents. SPARC (2006), for example, have produced an extensive overview of what it calls 'activity-friendly environments' including guidelines for how to create them. The Ministry of Health (MOH) *Healthy Eating – Healthy Action* strategic framework (2003) draws on the *Ottawa Charter* and recognises the importance of creating supportive environments, naming 'environments' as one of its five priority areas for action. One of their key actions is to "Ensure that impacts on...physical activity are considered in the development and re-development of towns, suburbs and communities so that infrastructure becomes more supportive..." (MOH, 2003, p. 34).

The MOH strategy is complemented by a Ministry for the Environment (MFE) report on the value of urban design (McIndoe, Chapman, McDonald, Holden, Howden-Chapman, & Sharpin, 2005) which notes that good design can offer health benefits by affecting people's willingness and ability to undertake physical exercise. Lastly, the Ministry of Transport's (MOT) walking and cycling strategy (2005) prioritises supportive environments and systems by focussing on factors such as land use, planning and design. The built environment studies that have informed these strategies have mostly focussed on resident or user perceptions of their surroundings, or have used various objective measures.

Studies concerned with the relationships between resident perceptions and behaviour (see, for example, Addy, Wilson, Kirtland, Ainsworth, Sharpe, & Kimsey, 2004; Duncan & Mummery, 2004; Sallis, Johnson, Calfas, Caparosa, & Nichols, 1997) have concluded that environmental characteristics, including aesthetics, safety, home equipment, convenient facilities, adequate street lighting, and trustworthy neighbours, have differential influences on self-reported physical activity. For

example, Addy et al. (2004) examined perceived supports for physical activity and found that people with positive perceptions of street lighting, trustworthiness of neighbours, and accessibility to private recreational facilities were more likely to be active. In their exploratory study of older Australian adults Carnegie, Bauman, Marshall, Mohsin, Westley-Wise and Booth (2002) found that perceptions of aesthetic and practical features of the physical environment were significantly associated with motivational readiness for physical activity.

Research using objective measures such as Geographic Information Systems (GIS) data link aesthetics, safety, the proximity of footpaths and other factors to physical activity (Duncan & Mummery, 2005; Garrett, Mackay, Badland, Svendsen, & Schofield, 2007; Leslie, Coffee, Frank, Owen, Bauman, & Hugo, 2007). Although research examining perceived or objective measures of the built environment and the associations with physical activity is ongoing, some believe that both types of measures are necessary (McGinn, Evenson, Herring, Huston, & Rodriguez, 2007). In order to better explain this complex relationship I will now discuss the research findings linking various elements of the built environment to physical activity behaviour.

Urban design

Urban design can be described as "the design of the buildings, places, spaces and networks that make up our towns and cities, and the ways people use them" (Ministry for the Environment [MFE], 2005, p. 12). Urban design describes the general process of conceptualising, planning and implementing changes in the built and natural urban environment, giving regard to function, form and the relationships between numbers of variables. While these are inclusive definitions, encompassing social as well as physical dimensions, I focus only on the physical dimensions in this section. Three of the key elements of urban design that can impact on behaviour are connectivity, land use mix, and density.

Connectivity can be defined as the physical conditions that facilitate access within a region, city, town or neighbourhood (MFE, 2005), where access refers to non-motorised forms of movement. For example, a grid-like street layout is hypothesized to make travel between two points - 'as the crow flies' - shorter and more direct than a cul-de-sac type layout. Various studies and reviews have examined how built environment factors, including connectivity, influence physical activity

behaviours such as walking and cycling (see, for example, Aytur, Rodriguez, Evenson, Catellier, & Rosamond, 2007; Handy, Cao, & Mokhtarian, 2006; Rodriguez, Khattak, & Evenson, 2006). For example, Li, Fisher, Bauman, Ory, Chodzko-Zajko, Harmer, Bosworth and Cleveland (2005) studied the influence of selected environmental factors on walking in older adults and found that neighbourhoods with greater numbers of intersections, and therefore better connectivity, were associated with more frequent walking.

In another study, Rodriguez et al. (2006) compared *new urbanist*² neighbourhoods with conventional suburbs and found that there were no overall differences in physical activity levels. However, they did find that residents in new urbanist neighbourhoods were more active within their own neighbourhood and less likely to engage in activity inside their homes or in other neighbourhoods, and that they walked more for utilitarian purposes than for leisure. These findings point to an association between street connectivity and ease of local walking or cycling. In summary, well-connected cities, towns and neighbourhoods can encourage more walking and cycling to various destinations, leading to health benefits, and also enhance people's safety and security by encouraging surveillance (MFE, 2005).

Land use mix refers to the close proximity of a variety of different living and working activities within a neighbourhood. Urban design that supports mixed-use neighbourhoods can encourage walking and cycling, enhance social equity, and increase personal safety (MFE, 2005). Since the 1950s city areas have been mostly zoned as single use, that is, as residential, commercial or industrial use, and this can influence how far a person needs to travel between destinations (Frank, Engelke, & Schmid, 2003). If an area is zoned as mixed use then places of residence, shopping, work and entertainment could all be within close proximity. In their review of studies, Saelens et al. (2003) note that land use mix appears related to increased walking and cycling among residents. Their proposed model of the influences on walking and cycling (see Figure 2) illustrates some of the relationships they uncovered. Similarly, Humpel, Owen and Leslie (2002) reviewed various studies and found that accessibility of facilities and opportunities for activity, both of which can be influenced by land use mix, were associated with physical activity.

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² An urban design philosophy promoting more traditional neighbourhood design characteristics such as mixed use zoning, highly connected street layouts and higher density living

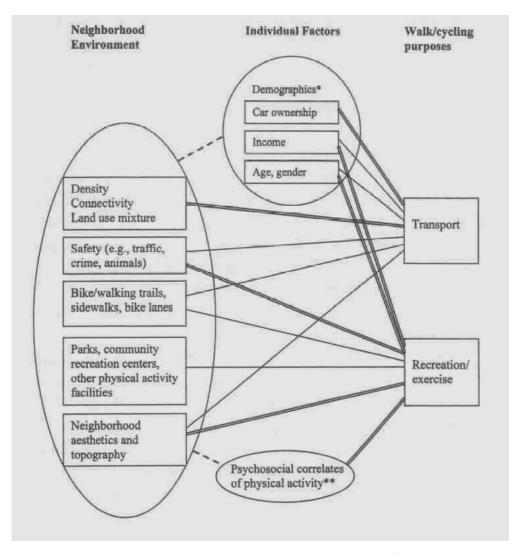


Figure 2. A proposed ecological model of neighbourhood environment influence on walking and cycling (Saelens et al., 2003). Double lines denote stronger relations; single lines denote weaker relations; dashed lines denote mediated relations. *Some examples of demographic variables are provided, but should not be considered comprehensive. **Psychosocial correlates of physical activity would include, but are not limited to, such variables as self-efficacy, perceived benefits, perceived barriers, social support, and enjoyment of physical activity.

The third urban design element is density, which can be defined as the concentration of population and activity in an urban area and can be measured in terms of people, jobs or building floor size in an area. When combined with other elements such as mixed use and adequate open space, higher densities can promote social connectedness and vitality and help encourage greater physical activity (MFE, 2005). Like mixed use zoning, higher density, which usually infers a more compactly built environment, has the effect of reducing distances between some destinations. Saelens et al. (2003) note that "population density is among the most consistent positive correlates of walking trips" (p. 84) for transportation purposes. However, density is a complicated concept and its influence on behaviour may not be uniform,

perhaps only taking effect when a critical mass of people and destinations are reached (Frank et al., 2003).

In addition to connectivity, land use mix and density, other characteristics of the built environment have been found to be associated with physical activity. Zimring, Joseph, Nicoll and Tsepas (2005) looked at building and site design and found that they influence physical activity at several spatial scales. For example, selecting an office site that is close to shopping, transport or eating establishments can encourage walking between destinations. Also, designing buildings with easily accessible stairs and other features such as walkable outdoor areas can help encourage activity. However, the authors note that "many activity-friendly features of the environment may be in competition with higher prioritized values or needs such as functional and budgetary considerations, increasing the difficulty in incorporating them" (Zimring, Joseph, Nicoll, & Tsepas, 2005, p. 189).

Berrigan and Troiano (2002) analysed the association between home age and walking behaviour in U.S. adults. They focussed on home age as an element of urban form because it is associated with density, street design, zoning, and building characteristics. Their findings indicated that those who lived in homes built before 1973 were likely to walk more than those in newer homes (Berrigan & Troiano, 2002). Badland and Schofield (2006) examined the relationship between town size and physical activity levels. They found that residents of large cities were less likely to be sedentary in comparison to small town dwellers, with city dwellers citing mainly social reasons and town dwellers infrastructural reasons for inactivity. These findings highlight how specific contextual factors can influence behaviour.

A variable that impacts on studies of associations between urban form elements and physical activity is that of self-selection (Handy et al., 2006). The self-selection issue revolves around the idea that people are not necessarily more active due to urban design elements but that they already value active options and choose to live in places that appear to be conducive to active living, for example by living close to city centres or amenities. This is a particularly relevant issue for studies of traditional or new urbanist neighbourhoods in that any correlations found may not necessarily infer causality. Nevertheless, Handy et al. (2006) found that changes to the environment may lead to more walking, regardless of resident values, choices or motivations. Furthermore, if people consciously choose to live in places that inspire

physically active lifestyles then this in itself must be considered a form of urban design 'evidence'.

Urban design development that is supportive of active living requires consideration of many factors and involves the continual assessment of past and current practices with a view to preventing past errors and making improvements. Therefore, in terms of the work ahead for planners, the challenge will be to continue finding "politically palatable ways of retro-engineering the existing urban fabric in ways which counter...negative trends" (Haughton, 2003, p. 232). This is a reminder that the built environment tends to be relatively permanent and that changes can be difficult, expensive, and often both. A prime example of a design trend that has been criticised and will have long-term effects is that of urban sprawl.

Urban sprawl can be defined as "an overall pattern of development across a metropolitan area where large percentages of the population live in lower-density residential areas" (Lopez, 2004, p. 1574). Modern suburbs are characterised by single use development, they typically promote low density housing, and purposefully separate different land uses, whereas traditional suburbs are characterised by higher population density, mixed land use, and high connectivity (Saelens et al., 2003). The likely reason for differences in physical activity decisions is that "as the city sprawls and as population density declines, both average trip length and overall car travel increase, with less use of alternatives" (Bachels & Newman, 2001, p. 137).

Researchers (Ewing, Schmid, Killingsworth, Zlot, & Raudenbush, 2003; Kelly-Schwartz, Stockard, Doyle, & Schlossberg, 2004; Lopez, 2004) have found associations between urban sprawl and resident health, even after individual variables were controlled, suggesting a causal pathway leading from urban sprawl, to increased vehicle use, to decreased physical activity, to obesity and its associated health problems. Saelens et al. (2003) support this hypothesis as their review found that people in highly walkable (less sprawling) neighbourhoods undertook more walking trips, which in turn equated to 15 to 30 minutes more walking per week for each resident.

Although low density housing is a feature of urban sprawl, Lunday (2003) suggests that sprawl problems are not solved by increasing the density of housing in suburban areas but by intensifying it in certain areas, based on existing travel corridors, as well as by having urban growth boundaries. Similarly, Gow (2000) suggests that the issue of low or high density development is not as important as "the

need for effective metro-scale regional strategies and ways to make them work" (p. 91). He adds that the strategies should be comprehensive and include environmental, social and economic dimensions. Therefore, it is essential for policy-makers to consider the varied impacts of their decisions on physical activity behaviour and public health in general (Frumkin, 2002; Graham & Arnold, 2005; Savitch, 2003). Another key area related to that of urban sprawl and connectivity is that of roading and transportation.

Roads and transportation

Lunday (2003) notes that: "The evolution of cities has been mapped by the relationship of transport and land use" (p. 170), indicating how inextricably linked these dimensions are. Prior to the industrial revolution cities were considered highly walkable, whereas thereafter 'walkable cities' became 'transit cities', and then eventually 'automobile cities' (Lunday, 2003). This evolution has had the effect, for Western urban populations, of gradually reducing or removing transport-related physical activity. The relationship between roading, transportation and physical activity can be illustrated by comparing the transport behaviours and safety statistics of U.S. and Australasian city residents with those of European cities.

Bachels and Newman (2001) note that New Zealand has a strong truck and car culture and that all too often transport planning is linear in nature, simply commissioning more roads when congestion increases. The authors also note that there is a direct relationship between vehicle speeds and volumes and the decrease in levels of cycling and walking. That is, the more that road networks and transport systems are designed with motorised vehicles in mind, the more likely they are to drive. This trend is reflected in New Zealand's walking and cycling statistics.

New Zealander's are walking and cycling less than in the recent past. Between 1989/90 and 1997/98 cycling dropped from 3.6 to 1.8 per cent and walking from 21 to 19 per cent of household travel trips, total cycling trip numbers dropped by 39 per cent, and the number of 'walk only' journeys dropped by 400 000 (MOT, 2005). New Zealanders are clearly finding it more convenient to use other modes for relatively short distances. This also seems to be a trend in Europe where more than 30 per cent of car trips cover distances of less than 3 km, and 50 per cent cover distances of less than 5 km (WHO, 2007). These distances can be covered by bicycle within 15–20

minutes or by brisk walking within 30–50 minutes, providing the recommended amount of daily physical activity.

The safety of walking and cycling appears to influence and be influenced by travel mode incidence. That is, when pedestrians and cyclists consider travel too dangerous they use other modes, while increases in motorised modes of transport tend to make other modes more dangerous. Jacobsen (2003) confirmed this relationship finding that as the number of cyclists and pedestrians increased the number of collisions with vehicles decreased. This highlights the potential benefits of discouraging motorised modes for short trips and supporting non-motorised modes in cities.

Traffic injuries and deaths give further weight to supporting active forms of transport. In the U.S. only 6 – 9 per cent of all trips are made on foot, yet pedestrians make up 13 per cent of all automobile fatalities (Frumkin, 2002; Savitch, 2003). In New Zealand, pedestrians and cyclists make up 35 percent of fatalities on urban roads, equating to 43 pedestrians and 10 cyclists in 2007 (MOT, 2005; 2007). As in the U.S., this is disproportionate to the average modal split, meaning it is more likely for a pedestrian or cyclist to die on the roads than a motorist. Greater vehicle usage is therefore negatively influencing levels of physically active transport while increasing pedestrian and cyclist injuries and fatalities. Notably, because the incidences vary between Western countries, it appears that transport planning and policy-making is a significant variable. Using a socio-ecologic framework, Aytur et al. (2007) examined land use and transportation plans and policies in various U.S. counties and their results indicate that both practices play a role in supporting active community environments by influencing leisure and transport-related physical activity.

Walking and cycling for utilitarian purposes or for other shorter urban trips appears to have great potential, not only for increasing populations levels of physical activity, but also for getting to know neighbours, building trust, supporting local businesses, reducing congestion, improving overall safety, and enhancing a *biophilia*³ effect. In Europe, a ministerial conference attended by ministers from 54 countries noted the potential of integrated strategies to reduce car use and promote cycling, walking, and public transport. They subsequently adopted a Charter on Transport, Environment and Health, which "emphasized the key strategic role of land-use

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³ This effect proposes that humans have an innate affinity with nature and a need to connect with it and links exposure to natural environments with improved mental and physical health

policies and urban and regional planning in promoting healthy transport" (Barton & Tsourou, 2000, p. 103). In New Zealand, the walking and cycling strategy, *Getting there – on foot, by cycle* (MOT, 2005) similarly focuses on supportive environments, as previously discussed, and is informed by the New Zealand Transport Strategy.

Community environments that are highly walkable and safe are thought to help increase the number of regular walkers (Doyle, Kelly-Schwartz, Schlossberg, & Stockard, 2006), while other studies have also found that the built environment positively influences levels of walking (Cerin, Leslie, du Toit, Owen, & Frank, 2006; Craig, Brownson, Cragg, & Dunn, 2002; Moudon, Lee, Cheadle, Garvin, Johnson, Schmid, Weathers, & Lin, 2006; Owen, Humpel, Leslie, Bauman, & Sallis, 2004). Similarly, for cycling, improvements in the built environment, transport infrastructure, and safety may help to increase the frequency of cycling, particularly for transportation, and the overall number of cyclists on the roads (Moudon, Lee, Cheadle, Collier, Johnson, Schmid, & Weather, 2005; Pucher, Komanoff, & Shimek, 2004; Titze, Stronegger, Janschitz, & Oja, 2007).

Pucher (1997), for example, describes how Germany increased the rates of cycling through significant public policy decisions at local and central government levels. He describes how they achieved a 50 per cent increase in bicycle share of urban trips by introducing measures that made cycling faster, safer, and more convenient while restricting car use and making it more expensive. Some of the measures include investment in bike paths, reduction of speed limits, reducing car parking, and privileging cyclist access and rights. Improving public transport and infrastructure through planning policies can therefore promote cycling and walking by making it possible to drive less, while making it more expensive to drive (Bachels & Newman, 2001; Handy, 2006; Kroon, 1990). In this section I have reviewed the significance of roads and transportation for physical activity behaviour, mainly in terms of active transport. In the next section I review the relationships between urban open spaces and activity.

Open spaces

The holistic nature of the active living concept means that active play, nature appreciation and general utilisation of open urban spaces becomes a consideration for interventions and research. In their comprehensive review of literature, Brennan Ramirez et al. (2006) found that access to parks for exercise, and aesthetics, were two

promising indicators of activity-friendly communities. Furthermore, numerous studies have examined the relationship between open space, physical activity and health. Among the findings were that walk-able urban green spaces improved senior citizen longevity (Takano, Nakamura, & Watanabe, 2002), greater access to parks was associated with greater physical activity for sedentary young people (Epstein, Raja, Gold, Paluch, Pak, & Roemmich, 2006) parks were a critical resource for physical activity for residents in low-income, minority communities (Cohen, McKenzie, Sehgal, Williamson, Golinelli, & Lurie, 2007), and that communities with parks had higher levels of walking and cycling for transportation (Zlot, & Schmid, 2005). In terms of general health benefits, parks, green spaces, and other 'healthy places' are being increasingly seen as highly important for the residents of urban areas (Frumkin, 2001; Frumkin, 2003; Killingsworth, James, & Morris, 2003; Kuo, 2003).

The 'greening' of a city centre can make it more attractive to pedestrians and cyclists and is thought to promote economic and environmental benefits by reducing automobile traffic, and therefore accidents and pollution, and by stimulating retail activity due to increased accessibility and pleasantness of surroundings (Roberts, 1990). Recent studies have started to look into the observable specific characteristics of open spaces with a view to establishing which characteristics are mostly associated with increased physical activity (Bedimo-Rung, Gustat, Tompkins, Rice, & Thomson, 2006; Saelens, Frank, Auffrey, Whitaker, Burdette, & Colabianchi, 2006).

However, it is worth noting that parks and playgrounds have been installed as 'standard' city facilities over the years, despite a lack of proof of causality in terms of physical activity or health. This is evidence that, following an initial introduction, community and local government valuing of facilities can bring about minimal standards in provision that defy any measurable cost-benefit analysis. It also usefully illustrates that action and advocacy need not wait for an abundance of research 'proof' (Edwards, 1992). My focus on nature and open spaces in the urban environment leads me to the issue of sustainable development and its implications for active living.

Sustainable development

The United Nations World Commission on the Environment and Development (1987) define sustainable development as the type that meets the needs of present generations without compromising the ability of future generations to meet their own needs. The concept of sustainability involves balancing the relationships between

social, economic, and environmental spheres of activity, the consideration of future generations, equity for all people and the distribution of costs and benefits, and integrated decision-making processes (Bray & Shaw, 2007). The emergence of sustainability development recognises past and current imbalances and is relevant to the area of population physical activity because of the potential benefits of focussing on human energy. Promoting active transport, designing activity-friendly suburbs and providing easy access to aesthetically pleasing open spaces can all contribute to sustainability goals.

Sustainable development practices tend to clash with many forms of economic development in that most private sector businesses seek to maximise profits with only minimal regard for any social, economic or environmental impacts. Rather than being pro-active, many businesses tend to operate on the basis of the minimum requirements of the law, in spite of the development of voluntary initiatives such as *corporate social responsibility* and the *triple-bottom-line*. This has implications for active living in that investments or commitments to activity-friendly initiatives may not be made, by either private businesses or local authorities interested in economic development, because cost-benefit analyses based on research are lacking, absent or unproven. Curiously, developers are *not* required to prove that their developments will not harm future opportunities for active living.

One way of ensuring balance may be for local government planners to commit to a *human ecology* model (Barton, 2005), which integrates the determinants of health and well-being into an ecosystem approach. Barton (2005) notes that "planning authorities act as gate-keepers to physical change and thus act to facilitate (or frustrate) activity, affecting thereby the quality of people's lives" (p. 353). The implementation of such a model by local authorities would consider the impacts and consequences of proposed or planned developments on physical activity behaviour before providing consent. Therefore, both built and social environments would need to support and reinforce the sustainable use of resources.

Social and economic environments

Individual-level and built environment factors can undoubtedly facilitate or constrain many forms of physical activity, but people's immediate social and economic circumstances can also have an impact on behaviour. Because some people engage in physical activity with little effort, while others find it difficult, it is

important to determine the factors that account for the difference in behaviour. Howden-Chapman (1999) explains that in terms of health in general, inequalities are influenced by socioeconomic differences and factors such as income, housing, taxation, employment policies and occupational health. Therefore, these factors are also likely to influence physical activity behaviour.

In terms of the value of social relations between people, Labonte (1992) suggests "the greatest disease reduction and health enhancement fitness programs engender may relate more to the socializing they create than the cardio-pulmonary functioning they increase and endorphins they release" (p. 219). This suggestion is reinforced by Ståhl, Rütten, Nutbeam, Bauman, Kannas, Abel, Lüschen, Rodriguez, Vinck and van der Zee (2001) who, in their study of over 3000 people from six countries, found that the social environment was the strongest independent predictor of being active.

A number of studies have examined the social situations of various groups in various settings. Leslie, Owen, Salmon, Bauman, Sallis and Lo (1999) studied physical activity behaviour in Australian college students and found that social support from family and friends was associated with active living. McNeill, Kreuter and Subramanian (2006) reviewed studies of the relationship between the social environment and physical activity and found that many factors impacted on physical activity behaviour: social support, social networks, socioeconomic position, income inequality, racial discrimination, neighbourhood factors, social cohesion and social capital. They did so through social and economic deprivation, stress, exposure to harmful elements, or restrictions of available resources. Some of these dimensions of influence have been studied more closely.

Social support is regarded as essential for well-being (Egolf, Lasker, Wolf, & Potvin, 1992) and can influence emotions, cognitions, and general behaviour, which in turn can influence physical activity behaviour (Carron, Hausenblas, & Estabrooks, 2003). Measures to improve social capital were also found to be potentially important for lowering the prevalence of health-related behaviours such as leisure-time physical inactivity (Lindstrom, Hanson, & Ostergren, 2001). These authors recommended that epidemiologists and public health practitioners concentrate on modifying the impact of disintegrating social structures on health, and shift from a focus on individual risk behaviour to patterns of civic and social engagement, including improvements to physical environments. However, Talen (1999) found that activity-friendly new

urbanist neighbourhoods did not necessarily enhance a 'sense of community' but suggested that intermediate variables may contribute to an effect.

How residents relate to other people, places and objects can also influence behaviour. Harvey (1973) writes of a 'geographical imagination', which "enables the individual to recognize the role of space and place in his own biography, to relate to the spaces he sees around him, and to recognize how transactions between individuals and between organizations are affected by the space that separates them" (p. 24). Continuing, Harvey (1973) states that there are professionals who possess powerful spatial consciousness but fail to recognize how space effects social processes, which explains why, in his opinion, there are numerous beautiful but unliveable designs. This is a reminder of the powerful effects of urban planning and design revealing how behaviour can be influenced directly but also socially through interpretation.

Economic factors at the individual, family or community level may also play a part in determining physical activity behaviour. In their study of a Swedish population, Lindstrom, Hanson, and Ostergren (2001) found that socioeconomic differences and gradients affected the extent of activity, with lower groups reporting less activity. Furthermore, they found that increased psychosocial resources had a positive influence on the effects of socioeconomic differences and gradients, and on leisure-time physical activity.

Other studies have found links between socio-economic indicators and physical activity. People with lower levels of income and education were found to be less likely to be sufficiently active, this despite tending to have higher rates of walking and cycling, and having more physically demanding jobs (Day, 2006). This could be explained by a lack of any planned leisure-time exercise. Saelens et al. (2003) also noted that people earning low incomes appeared more likely to walk for transport purposes than higher income people, while Estabrooks, Lee and Gyurcsik (2003) found that those from lower socioeconomic status neighbourhoods may be less active due to inaccessible leisure environments.

Inequalities in health, as highlighted by the work of Virchow in the 19th century (Waitzkin, 2006) can be related to inequalities in income (Coburn, 2000). According to Wilkinson (2000) the evidence suggests "that what matters to health is not absolute income and living standards, but relative income and social status" (p. 10). Similarly, Siedentop (1996) notes that health and mortality are associated with *relative*, not *absolute* deprivation and that relative deprivation can influence lifestyle

choices and access to social environments. He adds that the 'valuing' of physical activity behaviour is class determined, and advocates multi-level public policy and community action solutions rather than personalistic ones targeting risk factors. Inequalities of income are often seen as outcomes of the neo-liberal free-market practices that are currently dominating.

Neo-liberalist theory posits that the state needs to refrain from intervention into economic and social activities, deregulate labour and financial markets, and eliminate borders and barriers to allow for mobility of labour, capital, goods and services (Navarro, 2006). Drawing upon the work of Pusey (2003), McIntyre (2005) explains that this results in the economic ends of individuals being privileged, rather than those of collectives (society). This focus on economic ends in general may devalue less easily measured ends such as community mental and physical health, or social capital and cohesion. I believe that there is a place for government intervention in matters such as the activity-friendly urban design because past experiences show that market forces can fail urban residents in the long-term (see Harris, 2006).

The currently dominant hold of neo-liberalism in some way answers the question of why - when the causes of physical inactivity in Western countries and associated health problems are socio-cultural, environmental and economic in origin - the solutions are nevertheless thought to lie within individuals alone. It also positions free-market capitalists against government agencies that administer social policy. Labonte (2000) notes that, unless regulated by governments, markets do not fairly distribute burdens and benefits, and necessarily create losers and winners. He advocates ensuring equality of outcome, not opportunity, using the socio-environmental approach promoted by the *Ottawa Charter*.

For economists, neither health compromising behaviours (such as physical inactivity), nor differences in such behaviours across subpopulations (between rich and poor for example), are in themselves a cause for concern, except if they are the result of market failures, which can be caused by externalities, public goods, or information problems (Sturm, 2005). Markets are said to under-provide public goods, requiring subsequent collective action (Sturm, 2005). A safe water supply, infectious disease control, neighbourhood safety, street and sidewalk provision, landscaping and parks are all areas outside the realm of market management, and mainly controlled by local authorities. Creating supportive environments for active living could also be factored in as a public good, available to all, requiring attention by local governments

and relevant agencies, and compliance by developers or other private market operators.

In this section I have reviewed literature focussed on the relationship between built and social environments and physical activity. Many of the studies have found associations and correlations between these wider environmental factors and activity behaviour but the relationship is a complex one and may operate as a result of unique combinations of variables. Barriers to activity in these environments may be real or perceived, and studies have examined both. Furthermore, researchers from within various disciplines have studied physical activity behaviour in terms of its relationship to urban design, roads and transportation, open spaces, sustainable development, and various facets of the social environment. Findings have mostly shown associations but not direct causality. However, interpretations of causality with regard to environmental correlates are limited by the near-exclusive use of cross-sectional studies (Sallis, 2006). Furthermore, lack of causality should not prevent action in this area (Handy, 2006) and 'commonsense' suggests that the type of environment one lives in can influence physical activity opportunities and patterns.

The many associations that have been established by researchers have provided the impetus for various organisations to become involved in projects and further research. In the U.S. the Robert Wood Johnson Foundation funds the *Active Living by Design* programme which supports cross-disciplinary research on environmental factors that potentially increase population physical activity (Active Living by Design, 2007). The U.S. Centers for Disease Control and Prevention (CDC, 2005) has also initiated the *Active Community Environments* programme to promote similar policy and environmental research and interventions. In the U.K. and Australia similar research and initiatives have been in place for a number of years through the Commission for Architecture and the Built Environment (CABE), and the Australian Heart Foundation. Also, in New Zealand SPARC has produced guidelines for local government authorities to use to create 'activity friendly environments' (SPARC, 2006).

These bodies of research and cross-disciplinary initiatives from multiple countries all point to the important role of urban local governance. In New Zealand's urban areas, local city councils are in a prime position to influence and shape built and social environments. This is because they are commonly involved in managing urban planning and development, parks and gardens, community development, roading and

transportation, environmental health, city safety, sustainable development, and leisure facilities. They are also required to listen to and serve their residents and make decisions in collaboration with many other internal and external stakeholders, including public health professionals. Indeed, Bullen and Lyne (2006) suggest it is essential that New Zealand local authorities collaborate effectively with other agencies and parties if population physical activity goals are to be realised. In the next section I examine the role of local government in more detail.

Government, politics, power and behaviour

My previous sections showed how public health strategies can play a part in supporting population physical activity and how built and social environments influence behaviour. In this section I move onto the key role of urban local government in New Zealand by examining recent legislation and discussing a WHO document on the role of local government in promoting physical activity. I also provide examples of the long-term effects on physical activity behaviour due to local government influenced decisions and discuss ideas of government, power and population behaviour.

While local government authorities cannot be expected to predict all future trends and allow for them in planning, they can make and influence decisions on a daily basis, indicating their commitment to certain principles and beliefs, such as sustainable development. Because many local government activities involve relatively permanent structures such as parks, roads and buildings, it is important to ensure that these are sympathetic to active living ideals. Some researchers suggest that the behaviours and cognitions of community leaders and educators have the potential to change both residents' perceptions and environmental factors associated with physical activity (Bauman, Sallis, Dzewaltowski, & Owen, 2002; Luszczynska & Schwarzer, 2005).

Sallis and Owen (1999) note that the policies of government entities, such as local authorities, "are social expressions that can produce incentives or environmental alterations that can affect physical activity and inactivity" (p. 168). In their study of three European countries (Eastern Germany, Western Germany and Finland) Ståhl, Rütten, Nutbeam and Kannas (2002) found that the built environment and policy play an important role in physical activity participation and that policy orientation

targeting the whole population results in more opportunities for physical activity and better infrastructure. Librett, Yore and Schmid (2003) sought to determine local government intentions to implement physical activity-friendly policies and found that cities with high growth rates reported more ordinances encouraging physical activity. Local government support of active living through such mechanisms as policy change could, therefore, be considered a type of 'process variable', and is an underresearched area (Bauman et al., 2002).

An area of considerable potential for physical activity promotion in New Zealand is the Local Government Act (LGA) 2002 and the responsibility it places on local authorities to prepare three-yearly Long Term Council Community Plans (LTCCP). These strategic plans are designed to promote community well-being and sustainable development, including a requirement to engage with its residents to identify, prioritise, implement and monitor outcomes. It requires the local authority to collaborate with residents, central government and other private and commercial organisations to promote social, economic, environmental, and cultural well-being (Victoria University of Wellington, 2006). LTCCPs therefore develop a vision and a set of goals for councils and their communities to work towards. The various 'well-beings' also have the potential to influence active living environments, depending on the nature of the outcomes specified. For example, cultural well-being may involve enhancing and enabling community and individual participation in recreation, while environmental well-being may focus on the built environment including open spaces and public transport.

The WHO recently published guidelines that could work synergistically with local authority long term plans. The document: *Promoting physical activity and active living in urban environments: The role of local governments* (Edwards & Tsouros, 2006) reviews the available evidence on physical activity in the urban environment and makes suggestions for policy and practice based on that evidence. The authors suggest that promoting physical activity requires the involvement and cooperation of all levels of government and that local governments have a crucial role to play by providing leadership, legitimacy and an enabling environment for developing and implementing policies that support active living (Edwards & Tsouros, 2006). They emphasise the need to make the active choice the easy choice and believe that more people will be active if the environment is safe, convenient and generally supportive. To achieve this, the cooperation of urban planning, housing, transport, public health,

social services, education and sports sectors as well as private and voluntary sectors is required (Edwards & Tsouros, 2006). These guidelines will be useful for urban local authorities to promote active living in the long-term and avoid making short-sighted decisions that may have long-lasting effects.

To illustrate such short-sightedness, and the impact of past decisions influenced by local and central government, I will describe the shaping of Auckland city's infrastructure and the consequences for active living. Auckland is well known in New Zealand for having traffic congestion problems, the solutions to which have been made all the more difficult due to a lack of investment in rail and other public transport, and continued investment in roads. This is a good example of the linear planning philosophy, as discussed by Bachels and Newman (2001), which advocates the building of more roads to resolve congestion issues. Walking, cycling and other types of active living have been made all the more difficult because of these past political decisions.

Trotter's (2007) account of the political factors associated with Auckland's planning blunders provides a cogent reminder of how such decisions can become legacies for future generations. In his chapter entitled 'The Auckland that never was', he describes how the first Labour government's (1935 - 1949) plans for a geographically compact and intensively settled city, built around a cheap and efficient public transport network, were scrapped by the National Party. This change of heart "made the anarchic, automobile-inspired, socially dislocated sprawl of present-day Auckland inevitable" (Trotter, 2007, p. 205). Harris (2006) also describes how early development of land, rail and roads in New Zealand was led by the state, who recouped their costs from subsequent sales.

Public planning authorities developed blueprints for Auckland in 1946 and again in the 1970s incorporating traffic calming measures and including greenways linking cul-de-sacs to pedestrianised town centres (Harris, 2006). According to Harris (2006) these policies, which would have constituted activity-friendly planning, eventually collapsed, due in part to an increase in automobile numbers but also a polarised form of politics where private developers identified state-lead development with communism. This strategy succeeded in ensuring private developer primacy and subsequent relatively unplanned and automobile-oriented development (Harris, 2006).

This historical overview contextualises a recent research project by Garrett et al. (2007) which used population survey data and a range of methods to examine the

relationships between environmental design and physical activity in Auckland's North Shore City. This project was cross-sectional in nature, and sought to identify environmental determinants and perceptions of the environment in order to make recommendations for the future. At the same time it also inadvertently highlighted past decisions that have contributed to the current situation. For example, their recommendations included a future urban design focus on street connectivity and non-motorised commuting, pointing to past design and layout decisions that have conspired against active living.

These discussions emphasise the political nature of environmental support for active living and point to the value of examining local politics and the workings of power at the local government level to understand how decisions are made and the influence of various stakeholders. Examining local authority strategy, policy and planning documents that influence the shaping of built and social environments, and interviewing local authority staff members involved in the shaping of these environments, could facilitate such understanding by exposing the multitude of influences and factors that impact on decision-making. Such an investigation would reveal power relations between various stakeholders and the consequent effects. Thus, in this study I undertake a case study of Hamilton City Council policies, strategies, and practices with the goal of highlighting these discourses and power relations. In so doing I hope to highlight some of the factors leading to costly retro-fitting, inform current decision-making and strategy development, influence long-term resident physical activity, and reveal important ethical considerations.

Summary, research question, and rationale

In this review of literature I have focussed on the rapidly growing body of research that has examined the links between built and social environments and physical activity behaviour. I began by reviewing the development of a focus on population physical activity - which is strongly linked to health - and highlighted how public health has achieved successes by examining broader environmental factors. I then reviewed studies that have found associations between built and social environmental factors and physical activity behaviour. This research generally concluded that, while it is difficult to prove causality, there are clear associations between urban environments and physical activity behaviour, and that these

environments enable or facilitate active living by removing or reducing actual or perceived barriers and enhancing opportunities. In essence, manipulating built and social environments can make active living easier for urban residents.

Because the studies I reviewed focussed on wider environments they utilised mainly ecological models. Generally, these models recognise multiple influences at multiple levels and consequently advocate environmental and policy approaches to promoting physical activity. The ecological paradigm requires an appreciation and understanding of multiple research disciplines other than those relevant to individual behaviour change. As a consequence, literature from public health, transportation, urban planning and design, parks and open spaces, recreation, geography and the social sciences all become relevant for population physical activity research and intervention. Therefore, a move towards more collaborative, multi, or transdisciplinary work is supported by various researchers (see, for example, King et al., 2002; Wells, Ashdown, Davies, Cowett, & Yang, 2007).

As well as revealing the strong associations between the wider urban environment and physical activity behaviour I also stressed the role of local governments in shaping these environments. Examining the strategies, policies, plans and practices of a local authority by way of a case study has the potential to identify important power relations and implications for urban residents. Stake (2005) emphasises that case study research is useful to practitioners and policy makers because it constitutes an extension of experience. Furthermore, qualitative research using case study methods have not been employed much in physical activity studies (Sallis et al., 2006) and have the potential to reveal why programmes and policies are effective or ineffective (Hoehner, Brennan, Brownson, Handy, & Killingsworth, 2003). Therefore, a case study could usefully inform both current practice and physical activity research. I will discuss the value of a case study in greater depth in my methodology chapter.

There has been little research carried out on local governments and their role in terms of population physical activity or active living. Furthermore, there has been little qualitative work carried out using Foucauldian discourse analysis to attempt to understand population physical activity behaviour, and the political or power effects at local government level. This research thesis therefore asks: What discourses underpin local government planning, decision-making and action with regard to built and social environments for active living?

Knowing what factors or discourses shape and constrain policy makers' decisions can help to uncover conflicting priorities or interests. Furthermore, this study could help identify the social factors that influence these discourses. This case study, therefore, has the potential to reveal how local government officials understand the role of active living, highlight opportunities for enhanced collaboration, provide useful insights for other New Zealand local authorities, and inform future planning and decision-making. This study could also help develop strategies that facilitate the sharing, dissemination and application of research by planning and public health professionals and civil society alike. Furthermore, the use of discourse analysis is a departure from the quest for causal connections between social or physical variables and behaviour in physical activity research, and has the capacity to advance support for and understanding of the active living idea.

CHAPTER 3 – THEORETICAL APPROACH

In the previous chapter, I reviewed literature that examined the relationship between built and social environments and physical activity, while also sketching the history of public health and local government involvement in matters of population health. I concluded the chapter by summarising major reviews of the literature in general and highlighting a gap in the research. This led me to my research question which revealed my interest in the power effects of language and discourses, and my desire to carry out a case study of such workings, with a view to exposing barriers and opportunities to active living in Hamilton. In order to answer my research question - which concerns the way in which identified discourses influence planning, decision-making, action, and commitment to active living at local government level - I needed to employ an appropriate theoretical approach.

Theory can be viewed as a map that seeks to generalize explanatory stories about events and can be used to explain, predict and interpret (Miles & Huberman, 1994). As Craib (1992) notes: "Theory is an attempt to explain our everyday experience of the world", but it also has the capacity to tell us 'something new about the world" (p. 7). Social phenomena can be more specifically investigated by employing social theory. Citing Waters (1994), Harris (2003) notes how social theory takes a different and unusual stance towards the social world, viewing it in abstract, general, systematic and formal terms. Continuing, Harris (2003) suggests that individuals should not, therefore, approach a topic by employing unsystematic stances of personal 'common sense'. Thus, social theory can be defined as any theory, such as Marxist or feminist theory, which attempts to systematically account for the development and organization of the structure of a society.

Social theory can be used to analyse society through the use of theoretical frameworks. Social structures, such as local government authorities, and phenomena such as physical activity and active living, can be analysed within a particular school of thought, with each school potentially unearthing new insights. Social theory is particularly concerned with critical thinking, based on rationality, logic and objectivity, and places particular importance on developing 'knowledge' through the gathering of empirical evidence. Craib (1997) asserts that any social theory is difficult in that it tries to understand the complexities of social structures and processes by

engaging in investigations into different realms of social reality. Thus, in general terms, social theory can be useful for explaining and understanding experience, based on...general ideas about the world" (Craib, 1992, p. 8).

Because of my belief in the social construction of realities, and the importance of examining various 'ways of knowing' and constructions of 'truths', at the levels of both individuals and organisations, I utilised social theory to answer my research question. I utilised two distinctly different theoretical approaches in this thesis, namely Social Ecological Theory (SET), and Foucauldian discourse analysis. In this chapter I explain these theoretical approaches and detail my reasons for using them. First, I discuss the relevance of SET to my area of interest, and explain how I have used it. Second, I briefly background Foucault's ideas by discussing social constructionism. Lastly, I will examine a number of Foucauldian concepts, including discourse, knowledge, power, and governmentality.

Social Ecological Theory

While population physical activity research has focussed both on individual behaviour and on environmental factors (McElroy, 2002; Marcus & Forsyth, 2003), the majority of studies have examined behaviour, using either intrapersonal or interpersonal approaches (USDHHS, 1996). A criticism of most theories and models of behaviour change is that they place too much emphasis on the individual and focus too little attention on socio-cultural and physical environmental influences (McLeroy, Bibeau, Steckler, & Glanz, 1988; USDHHS, 1999). Relatively few researchers have employed broader, all-encompassing theories, models, or perspectives that have considered individual behaviour, micro *and* macro-level environments (Kerr, Eves, & Carroll, 2003), although Bandura (1986) and Bronfenbrenner (1977) are notable exceptions. My concerns about the predominant research focus, as outlined in Chapter Three, drew me towards Social Ecological models as a way of theorising about physical activity behaviour and intervention.

SET recognises the complex interplay between various factors that contribute to and shape physical activity behaviour and therefore discourages a focus on researching factors in isolation. The relationships between these factors can influence how people make sense of the world and, as a consequence, how they behave. The social ecological approach "seeks to unravel the forms and patterns of

interrelationships that give intelligibility to a community, be it natural or social" (Bookchin, 2003, p. 23), and is therefore compatible with an interpretive research approach. Compatibility aside, the social ecological approach is one that is now used by various physical activity behaviour researchers (see, for example, Spence & Lee, 2003; Zimring, Joseph, Nicoll, & Tsepas, 2005), situated within various research paradigms.

According to social ecological theory there are multiple levels of influence on physical activity (McLeroy et al., 1988). It stresses the importance of enhancing restrictive physical environments as well as developing personal skills (Marcus & Forsyth, 2003). The social ecological perspective promotes the idea that the success of an intervention is more likely when it influences multiple levels (e.g., intrapersonal, interpersonal, institutional, community, and public), and multiple settings (e.g., home, workplace, built environment, place of learning, or community centre) (McLeroy et al., 1988). Interventions that can simultaneously influence multiple levels in multiple settings can be expected to be more effective in the long-term (USDHHS, 1996). Indeed, the development of guidelines to utilise social ecological models to enhance and promote healthy environments is well advanced (see, for example, Stokols, 1992, 1996).

Many researchers support a shift in research theorising to social ecological models (see, for example, Brug, Oenema, & Ferreira, 2005; Sallis & Owen, 1997). Indeed, SET has recently been used in studies of physical activity (Spence & Lee, 2003; Zimring et al., 2005), as well as diabetes (Whittemore, Melkus, & Grey, 2004) and obesity (Pepin, McMahan, & Swan, 2004). Spence and Lee (2003) developed a specific social ecological model for physical activity (see Figure 3) to guide future research and to be used for intervention work. The model emphasises the interrelatedness of various dimensions and recognises the influence of such factors as urbanization, availability of playground facilities, neighbourhood safety, and modernization (Spence & Lee, 2003).

SET can therefore be seen as a holistic way of conceptualising physical activity behaviour, where a disproportionate emphasis on one area of influence (e.g., personal efficacy) is seen as somewhat short-sighted and imbalanced. In New Zealand some initiatives already follow similar ecological principles, including the Te Pae Mahutonga model for Mäori health promotion (Durie, 1999), in which the physical environment, or Waiora, is said to play a key role. While social ecological and other

holistic models seem to be appropriate for addressing health issues within traditionally collectivist Mäori culture, they should not be precluded from being used more widely.

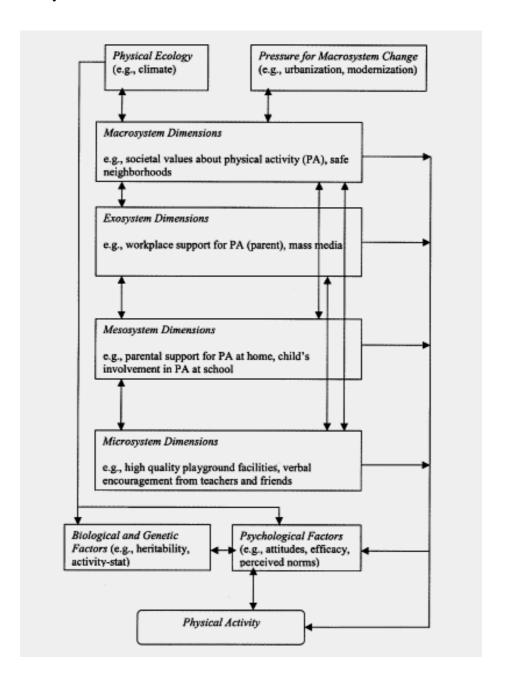


Figure 3. The ecological model of physical activity (Spence & Lee, 2003)

Wider application is advocated by James Sallis, a leading researcher in the area of environmental influences on physical activity, and colleagues (Sallis, Bauman, & Pratt, 1998; Sallis et al., 2006). He notes: "Ecological models are particularly well suited for studying physical activity, because physical activity is done in specific

places" (Sallis et al., 2006, p. 299). Zimring et al. (2005), for example, used an ecological model to discuss the influence of building design on physical activity behaviour (see Figure 4). Such studies emphasise the need to examine the characteristics of specific places such as buildings, roads, suburbs and parks, and the organisations responsible for developing and maintaining them. I have simply extended this observation by electing to study an organisation heavily involved in the shaping of such places and have applied SET principles by taking a trans-disciplinary approach to my data gathering. In practice this meant considering views from various areas within HCC, including Roads and Transportation, Strategic Planning, and Community Development.

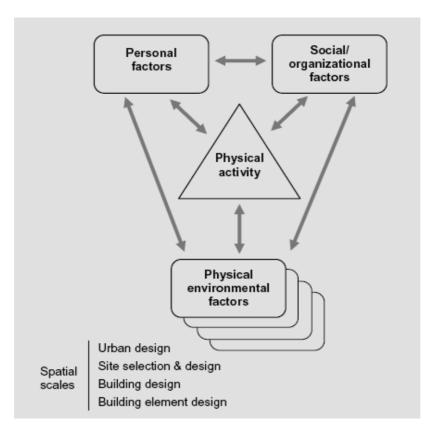


Figure 4. A social ecological model of urban design influences on physical activity (Zimring, Joseph, Nicoll, & Tsepas, 2005).

According to Sallis et al. (2006) ecological models help to focus on policy and environmental factors that may be some of the root causes of inactivity. The HCC is responsible for managing a variety of such policies and environments. Environmental and policy approaches target the larger environment in which traditional behaviour-only interventions take place (USDHHS, 1996) and therefore operationalise the

macro-elements of ecological models. An important premise of environmental and policy approaches is that promotion strategies should not rely solely on the requirement of individual initiative, but should also incorporate passive or indirect approaches, such as providing cycle paths or creating vehicle-free areas (Schmid, Pratt, & Howze, 1995).

Single or comparative case studies can provide the most useful research findings on public policy initiatives (Ståhl, Rütten, Nutbeam, & Kannas, 2002). Sallis et al. (2006) note that: "Examining the 'application' (or implementation) function of public policy highlights administrative capability and potential resistance. Statutes and regulations are ineffective unless they are implemented, which requires administrative capability and willingness" (p. 312). Case studies can therefore "identify obstacles to implementation and strategies for overcoming them" (Sallis et al., 2006). Pucher (1997) points to cycling trends in Germany as proof that public policy can make a real difference to population behaviour.

In sum, SET and environmental and policy approaches are gaining in popularity for research into health and other behaviours, due in part to their potential to consider a multitude of factors, and potentially impact on greater numbers of the population. I therefore used these approaches to guide interview script development and documentation collection, as outlined in Chapter Four. The implication for their use in my study is that I will likely gain a more comprehensive understanding of the multiple physical activity influences and their inter-relatedness. Such understanding will be made possible by taking a different theoretical approach to the data analysis, one focussed on socially constructed meanings.

Social constructionism and discourse

As discussed in my introductory chapter, my ontological and epistemological assumptions mean that I believe people actively construct their social world and realities. The interpretation of social realities is therefore a matter of interest to me, especially considering how certain ways of knowing and certain values can become privileged, determining what knowledge 'counts' or not (Mills, 1997; Sparkes, 1992). It is important to study the processes by which any body of 'knowledge', in all its forms, comes to be socially constructed as 'reality' (Berger & Luckmann, 1967). As I have alluded to already, I believe that social explanations of physical activity and

active living hold greater potential for understanding than do those based on individual characteristics or genetic or biological factors. The examination of privileged and excluded ways of knowing can lead to greater understanding of the influences on physical activity behaviour.

In my review of literature I highlighted the growing body of evidence connecting physical activity behaviour with physical and social environments, and suggested that local governments were well placed to manage, shape, and influence these environments. Local government authorities are therefore key sites of knowledge and reality construction, while at the same time being shaped by discourse and power themselves. Some of the key mechanisms for this include the dissemination of policy documents and media releases, and through staff member activities and talk. These constructions are formed as a result of engagement in the social world, and can be influenced by cultural and historical shifts. Burr (2003) explains that concepts and categories relating to phenomena, such as physical activity, are acquired as people develop the use of language and that this language then provides a framework of meaning. Burr (2003) adds that the world gets constructed as people talk, so language should be considered a form of action, with practical consequences.

By examining more closely and questioning the language or discursivity of my research participants and of the council documents, ideas about what they count as 'truth', 'knowledge', or social reality become apparent. The social realities of public officials in local government are particularly important because they emanate from an authoritative institution, one that makes decisions for the common good. According to Mills (1997), institutions can play an important role in the development, maintenance and circulation of discourses.

A discourse can be considered a body of language-use, unified by common assumptions (Abercrombie, Hill, & Turner, 2000), or "a set of meanings, metaphors, representations, images, stories, statements and so on that in some way together produce a particular version of events" (Burr, 2003, p. 64). Discourse is a form of language use, and discourse analysis is concerned with identifying who it is that uses the language, how they use it, why and when (van Dijk, 1997). The identification and analysis of discourses can therefore give meanings to statements, statements which are regulated and have effects in the real world (Mills, 1997).

An example in terms of physical activity is a discourse of bicycle usage, in which a modern trend is to describe it as a form of 'active' or 'alternative' transport. Such descriptions could be seen as representing cycling as something to be done purely for exercise or as an environmentally responsible act, while positioning it as something other than normal, compared to motor vehicle use. It is through such discourse analysis that language-use can be studied.

Discourse analysis is both methodology and method; an epistemology to explain how we know the social world and a set of methods for studying it (Phillips & Hardy, 2002). It is primarily concerned with language, but not in the traditional sense of the word. Because language in discourse analysis is taken to be social practice, or a way of doing things, the phenomenon of interest in a research project is thought to be constituted in and through discourse (Wood & Kroger, 2000). Similarly, Fairclough and Wodak (1997) note that "discourse is socially *constitutive* as well as socially shaped: it constitutes situations, objects of knowledge, and the social identities of and relationships between people and groups of people" (p. 258).

Generally, the aim of discourse analysis is "to uncover the larger patterning of thought that structures the way language is used, and, more specifically, how the meaning of that language was created, reproduced, and interpreted by those involved in its use" (Tolich & Davidson, 2003, p. 129). Furthermore, the use of language and texts in discourse analysis means that researchers are part of the constructive effects of discourse, and therefore need to be reflexive (Phillips & Hardy, 2002). During the process of analysis, and subsequent writing up, I have tried to be reflexive by examining my personal biases and preconceptions in terms of my overall approach to the subject and my interpretation of the data. Such reflexivity can identify and offer explanations to problematic or contradictory findings, including my own possible influences on the research (Fontana & Frey, 2005).

My research question reflects my desire to identify the discourses prevalent in HCC discussions or writings about built and social environments, as they relate to physical activity. Such discourses give rise to power effects. The way local government officials socially construct matters relating to built and social environments through talk or text can have practical consequences for urban residents, and such constructions can be examined through the analysis of the language used. Because of my interest in power relations and population physical activity, and the political nature of local government activities, I have chosen to utilise Foucault's

unique 'theorising' of power, knowledge and truth, the elements that for him constitute discourse (Mills, 1997).

Foucault and discourse

The workings of the social world in terms of discourse, power and the social environment have real implications for the creation of active living opportunities. Potter (1996) explains how Foucault freed himself from having to argue matters of truth by focussing on the production of knowledge through institutions, and on what that knowledge is used for. Foucault (1980c) talks about *regimes of truth*, which link truths to specific social organizations. Institutions such as city councils continually produce and circulate discourses that constitute new objects, or regimes of truths. Discourses can also produce subjects and in the case of local government some of the key identities formed are those of city official, city resident, and developer. Such people are constituted as subjects with certain knowledge, authority and skills (Potter, 1996) and are brought into being through the various discourses of local government.

Foucault argues that the social world is constituted by discourse, so our knowledge of the world is discursively determined (Abercrombie et al., 2000). Thus, to identify an individual as inactive or active is a discursive product because it only makes sense within a set of classifications that have been established by a particular discourse of physical activity. Other discourses, perhaps from the past or from other cultures, might see physical activity or inactivity quite differently. This does not mean that there is no such thing as being inactive in terms of sedentary living or work, rather the designation 'inactive' only has meaning within a specific discourse (Markula & Pringle, 2006). Discourses, therefore, make certain things say-able, thinkable, and do-able, while at the same time limiting what can be said about others. This closes off possibilities for particular understandings, leading to social effects. Therefore, particular discourses of physical activity limit other ways of thinking, and constitute an exercise of power. For example, the discourse that prioritises the facilitation of better motorised traffic flow means that people may not think about funding bicycle lanes, putting money into expressway roads instead. This discourse, therefore, has potential power effects, increasing traffic speeds and volumes and lowering the number of cyclists and pedestrians.

My use of Foucault in this research stems from how I situate myself in terms of research paradigm and from my views of the applicability of his writings to matters relating to modern forms of power, population control and behaviour. His works *Madness and Civilisation* (1965), *The Birth of the Clinic* (1973), and *Discipline and Punish* (1975) detail his thoughts on psychiatry, medicine, and penology, which are particularly relevant to the study of physical activity and health behaviour, in that they deal with the rise of discipline and the regulation of the individual. It is the techniques that result in this control that are intriguing and cause me to reflect on, or call into question, my own personal beliefs and behaviours, an area I will focus on later in this thesis. Foucault's conceptualisation of discourse sets the scene for thinking about institutional action or inaction relating to environments.

McHoul and Grace (1998) introduce Foucault as someone who undertook philosophy "as an interrogative *practice* rather than as a search for essentials" (p. 2), and describe how he is responsible for rethinking discourse, knowledge and power by opposing structuralist philosophies. According to McHoul and Grace (1998), Foucault does not believe that "any essential or 'real' structure underpins particular 'events' or historical materials" (p. 2). This is a move away from philosophies such as Marxism, which would hold that "'ordinary' language always needs to be supplemented by an analysis of its 'truer' and 'deeper' meaning" (McHoul & Grace, 1998, p. 23). It seems then that Foucault was not interested in seeking out determinable truths but finding out how a 'truth' can be told and the general domain of 'what can be said' (McHoul & Grace, 1998). The realm of 'what can be said', through identifiable bodies of knowledge, is that of discourse.

Foucault's 'theorising' about discourse provides the foundation and tools to analyse my data and investigate relevant power relations and effects. Foucault understands discourse as "the general domain of all statements, sometimes as an individualizable group of statements, and sometimes as a regulated practice that accounts for a number of statements" (Foucault, 1972, p. 80). Utterances and statements that have been made, that seem to form a grouping and have an effect can therefore be considered discourse (Mills, 2003), such as the discourse of physical activity or exercise. There are, however, likely to be multiple and, at times competing discourses of physical activity. For example, in terms of utility, a particular discourse may refer to the health benefits of physical activity, while another may denounce physical activity as a waste of time and energy.

Fischer (2003) explains Foucault's notion of a discursive formation as something akin to a discipline such as science, law or politics. Foucault calls the conditions that make discourse possible 'rules of formation' and in his work he was particularly interested in the domains of knowledge that are constituted by these rules. Discourse is therefore "concerned with specifying socio-historic discursive formations, conceptualized as systems of rules that facilitate certain statements but not others at particular times, places, and institutional locations" (Fischer, 2003, p. 38).

According to O'Farrell (2005), Foucault believes discourse is "controlled, limited and defined by exercises of power and draws attention to the way boundaries between the true and the false are erected within this context" (p. 42). In terms of effects, Foucault (1972) asserts that discourse determines our perceptions of reality. Clearly then, discourses can constitute powerful forces with implications for population physical activity behaviour, not only on the level of personal interpretation but in terms of institutions such as HCC that manage and control physical and social spaces such as roads and community centres.

Mills (1997) suggests that Foucault is particularly interested in the mechanisms by which discourses are produced as dominant and are supported by institutions and populations. I aim to identify some of the mechanisms by which certain discourses come to be supported by HCC, and the possible implications for city resident behaviour. Discourses can be seen as sites of power struggle, not existing in a vacuum, but in continuous conflict with other discourses and social practices (Mills, 1997). Theory concerned with the workings of power and knowledge helps me to understand the effects of discourse at the political level of a local authority institution. In particular, a Foucauldian perspective sheds light on the complex power relations involved in the development and implementation of urban design regulations and plans, or roading and transport strategies. Importantly, understanding Foucault's construct of power/knowledge can also point to ways of knowing, and therefore acting, which have been overlooked or excluded.

Power/knowledge

Foucault was concerned with the relationship between discourse, knowledge and power. Sawicki (1991) explains that Foucault viewed power as something exercised, rather than possessed, productive as opposed to primarily repressive, and as

something to be analysed from the bottom up. In the case of the HCC, it is their ability to define matters relating to the social and environmental management of the city that can enable them to proceed with their proposed plans, or indeed prevent different plans from gaining approval. Rail and Harvey (1995) explain that Foucault was interested in various knowledge formations and systems of power, including those that regulated corporal practices. As I have suggested in my review of literature, city governance could be considered such a system of power, and physical activity behaviour a corporal practice.

According to Burr (1995), Foucault viewed knowledge as historically and culturally specific and stressed the constructive power of language, suggesting that power is not something exercised by a person or group over others, but is the ability of a person or group to define the world in such a way that allows them to do the things it wants. He therefore saw power as relational; an effect of discourse and knowledge (Burr, 1995). Foucault's notion of power emphasized the importance of local or 'micro' manifestations of power and the role of professional knowledge in the legitimation of such power relationships (Abercrombie et al., 2000). However, this is not to say that groups do not meet with resistance. According to Mills (1997), Foucault claimed that all of the knowledge we have is the result or the effect of power struggles. Similarly, Caputo and Yount (1993) note how Foucault explained knowledge as something power relations produce in order to spread effectively, in other words, knowledge is applied power.

Burr (2003) explains how Foucault stressed the power implications of the development of the concept of 'population'. This relatively new way of viewing inhabitants gives rise to questions of management and control. Burr (2003) continues:

Foucault believes that there has been a radical shift in the way that western societies are managed and controlled. This was a shift away from 'sovereign power' in which the sovereign controlled the populace by the power to punish, coerce or kill them, towards 'disciplinary power', in which people are disciplined and controlled by freely subjecting themselves to the scrutiny of others, especially experts, and to their own scrutiny. Such disciplinary power, he believes, is a much more effective and efficient form of control. (p. 72)

The circulation of specific discourses can, therefore, act as forms of social control. They can be tied to social structures and practices in ways that mask power relations operating in society (Burr, 2003). Hawkes (1996) notes that Foucault avoids a description of power that allows for the discovery of a single central source from which it flows, and Cole et al. (2004) explain that "modern power operates invisibly but is visible in its effects" (p. 210). So an institution such as HCC, rather than being a source of power, may serve as a hub or intermediary through which discourses circulate, resulting in visible power effects. This is not to say however that the HCC cannot act to generate, maintain or exclude certain discourses.

Foucault (1983) was particularly interested in the means of socially controlling people, or "technologies of power" (p. 18). He explained how the regulation of population health as an objective of power began in the eighteenth century, turning it into an imperative: "at once the duty of each and objective of all" (Foucault, 1980b, p. 170). The discipline of public health has historically been closely associated with the state and governance. Local authorities, therefore, have a history of involvement in the shaping of citizen behaviour as a form of population control. Foucault used the terms bio-power and governmentality to discuss such control.

Bio-power and governmentality

While Foucault's central concepts are discourse and power/knowledge, his related concepts of bio-power and governmentality are particularly relevant to my study because the actions of local governments have consequences for resident behaviours. Cole et al. (2004) explain how Foucault uses the term bio-power "to describe modern power's regulation of individual bodies and the population" (p. 216). Foucault (1978) details the development of governmental interest in power over life, supervised "through an entire series of interventions and *regulatory controls: a bio-politics of the population*" (p. 139, emphasis in original). This, according to Foucault (1978), was when the formal administration of bodies and management of life began, "marking the beginning of an era of 'bio-power'" (p. 140).

Foucault (1978) went on to note that bio-power was crucial to the development of capitalism, remarking that without "the controlled insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes" (p. 141), capitalism would not have thrived. This brings about

a utility to the regulation of bodies; the development and maintenance of a supply of productive citizens. Foucault developed his ideas concerning the governance of behaviour further via his writings on what he called 'governmentality'.

Governmentality was an overarching concept of Foucault's thinking, referring to the administrative structures of the state, patterns of self-government, and regulatory principles of social structure (Abercrombie et al., 2000). Foucault (1991) defined governmentality as "the ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics, that allow the exercise of this very specific, albeit complex, form of power, which has as its target populations" (p. 102). He therefore wished to emphasize "the critical role of *mentality* in governing populations" (Cole et al., 2004, p. 219). Governmentality refers to a "way of thinking about the administration of society, in which the population is managed through the beliefs, needs, desires, and choices of individuals" (Maguire, 2002, p. 307). Governmentality can therefore be thought of as "the conduct of conduct" (Burchell et al., 1991, p. 48). Simons (1995) elaborates: "One governs one's own conduct, while government guides the conduct of others" (p. 36). In other words, government is the connection between ethics and politics.

Foucault (1991) also uses governmentality to describe who can govern, who is governed, and the means by which the shaping of others' activities is achieved. He was concerned with the practice of Western government to be a government of 'all and of each' and that their concerns would be to 'totalize' and 'individualize' (Gordon, 1991). In other words, over time society has become a political target of the state (Rabinow, 1986). As Maguire (2002) notes, the effect is that "the population, like the individual body, is rendered knowable (and thus subject to regulation via normalisation) through the production of knowledge" (p. 301). Cole et al. (2004) add that various disciplinary practices "create 'docile bodies': controlled, healthy, and regulated bodies, bodies whose training extends their capacity and usefulness" (p. 212). The population of the city of Hamilton is governed, to a degree, by the HCC. Through activities, such as community outcome surveys, HCC seek to know the population; their desires, aspirations, dislikes and likes. Through such practices the HCC is able to 'individualize' the population, regulating through processes of normalization. For example, some practices such a walking and cycling for leisure and recreation, can be promoted over others, such as walking and cycling for transport or business purposes. HCC are using their unique position as governing local

authority to make decisions about which forms of physical activity are important and which are not, and where such activity should take place.

Again, this paints a somewhat repressive picture but, consistent with his general 'theory' of power, Foucault interprets the exercise of administrative power in productive terms. Indeed, he is said to have argued that those subscribing to this repressive theory of the state tended to focus less on the potential for change or the fragility of power maintenance (Mills, 2003). Thus, while local government could be shown to be interested in shaping its citizens, it could also be exposed as rather unstable. This means that any strategies or plans developed to shape communities could be vulnerable to change or abandonment.

An example of such fragility is the factor of intentionality, or will, within corporate bodies or institutions. Drawing on Foucault's ideas, Mills (2003) notes that a disjuncture can exist between intentions in the form of, for example, mission statements or values, and what actually happens. Indeed, the HCC has specific mission and vision statements (see Figure 5), as well as broad goals relating to its various strategies. However, working towards organisational goals can easily come into conflict with complex external influences and unexpected barriers. Therefore, suppressing opportunities for active living may not be the aim of urban local authorities but could eventuate due to the influence of factors such as capitalist activity.

Employees within various departments of a city council strategise in order to manage and best serve their constituents. They do so by learning from the past, listening to stakeholders, examining 'best practice', and then creating a vision for the future. These could be considered knowledge-producing processes. Foucault does not get caught up in determining whether such institutional knowledge is true or not, but he focuses on the production processes, or *regimes of truth* (Foucault, 1980c). Through their staff members and official texts, institutions such as city councils are, therefore, both shaped by existing discourses *and* help to produce discourses which constitute new 'subjects' and 'objects', or sustain existing ones, relating to physical activity, such as leisure, recreation, transport and health, and then shape them over time.



Figure 5. Hamilton City Council Vision and Mission (HCC, 2006a)

Despite the idea that disciplinary powers can be exercised by state institutions, Foucault insisted that power is omnipresent, existing inside relationships and sustained by confrontations within them (Markula & Pringle, 2006). City council plans, strategies and practices that potentially impact on physical activity behaviour could be seen as social control and are therefore able to be resisted or negotiated by various stakeholders, including other council employees. The HCC is a prime site for understanding social realities because it is possible to determine what population behaviours and power relations it relies on to administer its work (Maguire, 2002).

The formative and productive nature of practices is the essence of discourse (Mills, 1997), and the legitimating nature of institutional practices may well serve to mask any power relations that enable or constrain physical activity. This research, therefore, aims to uncover these relations. The process of uncovering ways in which 'objects' and 'subjects' come into being and social realities are constructed by local government through discourses and discursive structures is explained in the methods section. My task, therefore, is to explore the relationship between discourses and the social realities of local government employees, including the contexts in which the discourses arise (Phillips & Hardy, 2002).

Summary

Having previously established the importance of built and social environments for active living in urban environments, and the role of local governments in planning, shaping and managing these environments, I have turned my attention in this chapter to the theories that helped me develop my methods for data collection and analysis. I discussed Social Ecological Theory and its importance in terms of understanding social and environmental influences on behaviour. Because such behaviour is influenced at multiple levels and in multiple settings then it is useful to consider research from multiple disciplines and, similarly, the comments from local government officials working within various disciplines, sectors or departments.

My decision to utilise Foucauldian discourse analysis for this thesis is based in part on my own paradigmatic worldview and on my ability to relate to Foucault's conceptions of discourse, power, and population control. As stated earlier, the advocacy and promotion of supportive environments for active living could be seen as a form of population control, a view that requires some reflexivity and ethical scrutiny. My own criticisms of individualistic behaviour-change approaches warrant examination along with my advocacy of the alternatives. An appealing aspect of Foucault's work is that he encourages such reflexivity.

A Foucauldian approach not only involves examining texts, identifying discourses and reflecting on personal views, but it also encourages me to think about how I make sense of the literature that informed my views and decisions. Foucault also provides the 'tools' to help answer my research question. His concept of discourses and their effects helps me to identify ways of knowing and the development of various truths. By excavating the discourses that shape local government texts and talk, in relation to built and social environments and physical activity, I hope to better understand the reasons for certain HCC processes and practices. Such discourses may, therefore, illuminate power effects in terms of their capacity to plan, make decisions, act, and generally commit to initiatives supportive of active living. Lastly, his ideas also influenced my choice of research methods, which is the subject of my next chapter.

CHAPTER 4 - METHODOLOGY

Although it is possible for a researcher to approach the same problem in different ways, it is the nature of the problem, as defined by the researcher, which determines the methods used (Thomas & Nelson, 1996). According to Patton (2002), the methods chosen for any research project are usually dependent on its context, that is, how the project relates to the general topic area of interest. This brings into focus the research paradigm I situate myself in and my research question. As discussed in Chapter Two, I am interested in understanding how the key officials within the HCC perceive population physical activity or active living and how they choose to, or are allowed to, act. This may help me to understand the wider question of how it is that city authorities place varying degrees of importance on support for active living, such as investment in cycle paths and restrictions for motor vehicle access.

My research question asks: What discourses underpin local government planning, decision-making and action with regard to built and social environments for active living? This question highlights my desire to identify ways of talking and knowing, with the goal of understanding rather than criticism. The focus of my research is the HCC, the local government authority for the city of Hamilton, New Zealand. Because I am restricting my study to one authority this research constitutes a form of case study. Case studies are concerned with specific, unique and bounded systems, and "are of value in refining theory, suggesting complexities for further investigation as well as helping to establish the limits of generalizability" (Stake, 2005, p. 460). The assumption is that case studies are by nature representative rather than isolated and may therefore be of use to others or be built upon (Thomas & Nelson, 1996). Although my goal is not to generalise the findings, my specific findings may still be of interest due to the similar structures, conditions and objectives of many New Zealand local authorities.

Due to my own assumptions about physical activity and active living and my interest in Foucault and his ideas about discourses, power and knowledge, I decided to conduct semi-structured interviews with selected HCC staff members and analyse relevant HCC documents. I believed that interviews would bring out complex conceptualisations and personal values while documents would reveal 'official' sanctioned HCC views on a variety of matters including the role of HCC and its

values and ideas about health and lifestyle. In the following sections I discuss my methods in terms of data collection and data analysis, followed by a discussion of the ethical issues, and limitations of the study.

Data collection

Participants

With ethical approval from the University of Waikato School of Education ethics committee, and consent from the Hamilton City Council, I interviewed seven HCC staff members to help gain insight into the decision-making processes, practices, values, and culture in the HCC with regard to my topic of interest. In order to obtain data that accurately reflected the policies and philosophies of the Hamilton City Council I needed to choose senior staff members within each department. The participants were nominated by their respective departments, but I decided on the units or departments they should come from and their areas of expertise. This selection of HCC departments and units reflected some of the commonly cited physical and social environmental influences on physical activity behaviour and as such constituted an application of social ecological theory. The participants came from the Community Development, Transportation, Strategic Planning (including Urban Planning and Sustainable Development), Parks and Gardens and Leisure Facilities departments. Employees in these departments influence and enhance such outcomes as social capital, transportation patterns and behaviour, behaviours attributable to urban design, use of parks and recreation facilities, and sustainability respectively. The selection of the participants from these specific and relevant departments and is a form of purposive sampling (Maykut & Morehouse, 1994; Sarantakos, 1998).

Purposive sampling ensures that participants are more likely to provide information-rich data and expand the variability of the sample (Maykut & Morehouse, 1994). That is, these representatives operate within a typical local government structure, and although the data is context specific in terms of Hamilton City's demographics, topography, and local industries, it is likely to be relevant for other councils due to the more generalised nature of the interview questions. Although emails and telephone conversations were necessary to gain consent and establish convenient dates and times for the semi-structured interviews, the participants were

not personally known to the researcher. The use of semi-structured interviews for selected participants is sometimes referred to as expert or key informant interviewing (Flick, 1998; Gratton & Jones, 2004). These interviewees were representatives from groups of experts and it was their specialist professional knowledge gained from experience that was sought after, rather than more general or personal knowledge. Because my research question focused on how local government officials plan, prioritize, strategize, collaborate, and act, questions in interview guides mainly sought to identify problems and opportunities at the organisational level, although personal views on active living were also sought.

As a case study of the HCC it was impossible to guarantee absolute confidentiality of the participants. However, in an attempt to protect the identities of individuals, pseudonyms are used throughout this thesis. In some cases the departments are identified. The lack of complete guarantee against identification was expressed in the initial ethical approval application and was highlighted to the HCC before they approved the commencement of the interviews. All participants signed consent forms prior to interviewing to remind them of these protections.

Procedures

As discussed previously, social ecological, policy, and environmental approaches to understanding and supporting physical activity and active living have the potential to inform research and practice. The theories and models generated by these approaches were used to gather data in terms of guiding interview schedule development and documentation selection. Before interviewing HCC employees I conducted a pilot interview to test the workability, logic, and flow of the interview guides, which resulted in minor changes being made.

Before commencing with the interview questions participants were asked to introduce themselves and give basic details of their positions within Council. We then discussed broad definitions of the terms physical activity and active living to ensure clarity of understanding. Here I also stressed that the interview was not seeking to critique their personal work or understandings about physical activity, rather to hear about Council practices and processes, past and present. Participants were informed that the interview would be taped and that their names, titles and roles would remain confidential. The interview proper began once the consent forms were completed. Interviews were approximately 1.5 hours long and were conducted at a time and place

convenient for the participant, which usually meant an HCC meeting room or a participant's office.

Participants were questioned about their roles and what influenced their decisions within those roles. They were asked to explain their interpretations of relevant strategies and plans and detail any collaboration or consultation processes. Each participant was asked questions relevant to his or her area of expertise, while all participants were asked a separate set of general questions. The questions were openended in nature and participants were encouraged and given the opportunity to freely talk about their own experiences and opinions (see Appendix A., p. 121, for a full set of interview guidelines). I approached each interview with the goal of eliciting frank and honest answers about their work at HCC, as well as information about processes, constraints and barriers to action. The interview guides were developed using research and agency publication literature, while the documents represented strategies that in some way impacted on active living. Participants were asked to comment on the processes and frameworks that guided action, such as Council's Long Term Council Community Plan (LTCCP) and the HCC strategic framework, as well as external influences such as central government legislation or non-governmental organisation activities. The processes, agencies, documents and legislation were either shown or referred to, as appropriate. While I was more concerned with the activities of the HCC, it is thought that 'the personal is the political' and it would therefore be useful to illicit personal responses for the purposes of comparison and contrast with other statements made. Thus, all interviews were concluded by examining their personal experiences and attitudes relating to physical activity and active living.

Semi-structured interviewing was chosen because of the desire to uncover how participants constructed meaning (Marshall & Rossman, 1995) in relation to physical activity and active living. Furthermore, this technique tends to provide greater breadth of data than other types of data collection (Fontana & Frey, 2000). Understanding the perspectives of those responsible for planning, interpreting, collaborating on, and implementing strategies and plans can help to expose problems and opportunities. The flexible nature of semi-structured interviews also allowed for the exploration of related themes, such as resident concerns and reaction, and the unintended consequences of any actions.

Fontana and Frey (2005) note that interviewing is "unavoidably historically, politically, and contextually bound" (p. 695), while Kvale (1996) suggests that "with

the breakdown of the universal meta-narratives of legitimation, there is an emphasis on the local context" (p. 42). Interviewee responses are, therefore, likely to have been influenced by current themes, trends, or topical publicised local issues. This includes reference, during interviews, to any contemporary issues related to sedentary living, obesity, the role of local government, and issues of stakeholder involvement, such as consultation processes under the LTCCP. Not only are social realities based on the unique perspectives of the interviewees, through conversation and action, but also influenced by my perspectives as interviewer. As a consequence, the qualitative research interview itself becomes a construction site of knowledge (Kvale, 1996). According to Kvale (1996), knowledge derived from interviews relates to a number of features of its construction, including knowledge as conversation, as language, as context and as interrelational. Continuing, Kvale (1996) suggests there is a move toward discourse and negotiation about the meaning of the lived world where access to knowledge is all important. This means that an interviewees' discourse is of interest in its own right and that discourse analysis is not so much a method as an approach, because it focuses on "the constructive nature of questioning, transcribing, and analyzing in interview research" (Kvale, 1996, p. 43). Language therefore is all important as it constitutes reality and is both the tool of interviewing and the object of textual interpretation. The representational nature of texts is therefore the focus of my data analysis method.

Data analysis

Following the completion of all the interviews I arranged to have the recordings transcribed, resulting in 143 pages of text. In order to check the typed transcripts I listened carefully to each recording. I undertook this process to fill in gaps inaudible to the transcribers and make corrections to obvious errors. Kvale (1996) reminds us that interview transcriptions are not necessarily representations of some external reality but interpretive constructions. I employed inductive analysis techniques to examine the transcripts. Inductive analysis involves immersion in the details of the data in order to discover important patterns, themes and interrelationships (Maykut & Morehouse, 1994; Patton, 2002). As a result of this approach "theories about what is happening in a setting are grounded in and emerge from direct field experience rather than being imposed *a priori* as is the case in formal

hypothesis and theory testing" (Patton, 2002, p. 56). Therefore, no standard method was used for analysis, but meanings were generated in an *ad hoc* fashion (Kvale, 1996). First, I grouped data pertaining to built and social environments for active living into dominant themes. These themes were indicative of the commonly cited influences on decision-making at local government level. Once these broad discussion themes were identified my task was to identify and analyse the discursive resources the staff members drew upon in talking about the subject matter. I was particularly interested in the ways staff members positioned themselves with respect to certain discourses and subject matters, and looked for (in)consistencies in the statements made (Pringle, 2003). As I discuss shortly, a Foucauldian perspective was helpful here.

I also examined and analysed a selection of official HCC documents. I chose to only examine documents published by HCC and available to the public and written for informational purposes. This decision was made because these documents were designed to be widely read and reflected 'official' communications of council plans, aspirations, values and role. While many of the documents were available via the HCC website, I simply gathered the latest version or latest release by visiting the HCC offices. My final selection was only decided after the interviews had taken place as references were made to various documents in those interviews. While no document specifically discussed active living or physical activity, I included a variety of documents that either specifically made reference to physical activity or active living, or I considered them to be relevant for regulatory or legislative reasons (for example the *District Plan* and the LTCCP).

Having collected relevant documents and transcribed interviews, my next task was to identify and analyse the discourses underpinning these texts. My belief that knowledge and 'truths' are socially constructed influenced how I approached my data. I attempted to identify taken-for-granted knowledge, provide possible reasons for particular ways of understanding, examine the social processes that sustained certain knowledge, and identify which social actions are sustained and which are excluded by social constructions (Burr, 2003). I wanted to identify the various discourses that underpinned statements made in interviews and documents and ultimately to suggest reasons for particular effects. Both interview transcripts and official documents were analysed using Foucauldian 'tools'.

The Foucauldian method

In this section I will describe, using Foucault's concepts, how I uncovered patterns of thought, made sense of the data and the data analysis process, and formed a coherent method. Foucault himself was rather non-committal about a particular 'method' for undertaking data analysis so I approached the process using my own interpretations of Foucault's writings. I have therefore focussed on the 'ideas', or discourses, that structured some of the key answers to my interview questions and the document texts, and their power effects.

As discussed previously, Foucault claims that discourses shape the statements that can be made and bring ideas or objects into existence. This emphasises the powerful nature of discourses in terms of producing 'truths' and knowledge but also the way they can obscure what can be said and perceived. Foucault (1972) defined discourses as specific systems of meaning that form the *identities* of subjects, practices, and objects. This definition was used to identify the discourses that the staff members spoke of and authors wrote of, in referring to such subjects, practices or objects (Pringle, 2003). In other words, I examined the texts to seek out the systems of meanings employed to refer to relevant subject matter.

Foucault (1972) explains how it is that statements play a part in forming objects but notes that broad concepts, such as physical activity or active living, constitute a multiplicity of objects and that groups of statements can, therefore, refer to more specific objects within those broad concepts. Foucault (1972) goes on to explain that "whenever, between objects, types of statement, concepts, or thematic choices, one can define a regularity (an order, correlations, positions and functionings, transformations), we will say, for the sake of convenience, that we are dealing with a discursive formation" (p. 41, emphasis in original), and that discourses should be treated as "practices that systematically form the objects of which they speak" (p. 54).

It is the power effects of discourses, through the maintenance and exclusion of certain knowledge, that interest me the most. Foucault (1978) suggests that power must be understood as a multiplicity of force relations and "as the strategies in which they take effect, whose general design or institutional crystallization is embodied in the state apparatus, in the formulation of the laws, in the various social hegemonies" (p. 92). HCC strategies, policies and plans, whether written or spoken, can therefore be analysed in order to understand power relations once the underpinning discourses are identified.

Foucault (1978) sets out some "precautionary prescriptions" with which to investigate power relations and discourses, the last of which he calls the "rule of the tactical polyvalence of discourses" (p. 100). This rule emphasises the multiple facets or forms of discourses and reminds us that power and knowledge are 'joined together' through discourse. By identifying the discourses underpinning HCC statements I am also able to identify the 'ways of knowing' that carry the most weight, and suggest certain power relations. Power and knowledge, therefore, give rise to discursive effects. Foucault notes that "discourse can be both an instrument and an effect of power, but also a hindrance, a stumbling-block, a point of resistance and a starting point for an opposing strategy" (1978, p. 101). Therefore, Foucault wants us to remain alert to the multiple interpretations and possibilities of discourse, which then forces us to also examine our own ways of knowing as researchers.

Foucault (1978) also notes that discourses must be questioned on two levels; their 'tactical productivity' and their 'strategical integration', that is, the reciprocal effects of power they ensure and the force relationship that makes their utilisation necessary. By interrogating the discourses I am able to suggest ways that they tactically operate to produce effects. Foucault wants us to orient ourselves away from traditional ways of viewing various concepts, such as truth, knowledge and power, in order to see more clearly how certain ways of knowing exist while others do not. Therefore, I employ Foucauldian 'tools' in the first instance to identify dominating discourses. I then interrogate these discourses in order to reveal the factors contributing to their circulation. Next, drawing on Foucauldian concepts such as biopower and governmentality, I investigate and suggest power relations and effects of the discourses identified. Lastly, I comment on how the discourses identified silence or obscure other discourses on the subject matter.

Burr (2003) notes that interviewed conversations can be "sites of struggle and conflict, where power relations are acted out and contested" (p. 41). My analysis will highlight some of these sites of struggle and conflict, and identify the discourses that led to the acting out of power relations. Throughout the remaining chapters of this thesis I make extensive use of quotes and excerpts from documents to illustrate my findings and give voice to HCC staff members (Janesick, 2003). I believe that this in turn will help readers to relate to the power effects I have suggested.

In sum, there have been many recent studies interested in finding causal connections between aspects of built and social environments and physical activity

behaviour, but few examining language and texts, discourses and power, and their possible effects in terms of active living. In this study I interviewed key HCC staff members and examined relevant HCC documents to excavate, using Foucauldian 'tools', the discourses that have shaped the statements made, and to also think about what was not said or obscured, and why this was so. Foucault (1972) reminds us that discourses not only limit and restrict what can and cannot be said about phenomena, they also empower certain people to speak on matters. These HCC texts therefore act as representations that bring about effects by authoritatively pronouncing on specific topics, and therefore the shape of the world (Prior, 1997).

In the forthcoming chapters I also consider in greater depth how these discourses are connected to power effects. For example, certain discourses may have contributed to the funding, or lack of funding, of activity-friendly initiatives such as pedestrian-only malls. I subscribe to the view that it is within discourse that power works and that various, often competing, discourses can enable or constrain certain events and activities. A Foucauldian method of discourse analysis is always subjective, so my aim is to make clear my own views and, as far as I am able, those of the staff members so that the reader can assess and make their own decisions about my findings and conclusions.

Limitations of this study

As mentioned above, I was the prime research instrument both for conducting the interviews and selecting the documents to be analysed. This introduces elements of subjectivity to the study topic and design as well as the data selection and interpretation. However, by reflexively identifying my experiences and biases to study participants and readers of this thesis I have endeavoured to remain transparent to all, therefore adding to overall understanding and credibility.

The participant responses were another limitation in that different participants may have generated different findings, and the selected participants may have held back or been selective in their responses. A reason for answering selectively could include protecting themselves or the organisation, especially if they believed the information could be used against them. However, this study did not seek to measure staff performance or standards, or seek generalizability, but to unearth discourses and power effects, so the issue of reliability, while important, is not essential. Sparkes

(1992) notes that for interpretive research, truth and validity is a matter of coherence, meaning that assessments can be made by readers on the basis of resonance, clarity, and well-considered argument.

Another limitation is that of interviewee selection and interviewee bias. Although I determined the actual departments, I allowed the HCC to choose the appropriate participants from each department for interviewing. Details of the research topic and indications of interview questions were also divulged in advance, meaning that HCC staff could have carried out preparatory work prior to interviews, including discussions with other participants. Regardless of such potential, I believe my research method and 'interpretations' are valuable in that they add unique insights to the body of knowledge in this broad area of research and may well spark more studies of this nature.

Summary

In this chapter I have outlined the methods I employed to help answer my research question. Essentially, my research project was developed following a review of literature on the influences of built and social environments on physical activity, the identification of gaps in the literature, and my interest in politics and power. My choice of research methods, therefore, was based on what I considered would produce compelling data and findings, given my research question and the time and financial limitations. Accordingly, I decided to carry out one-on-one semi-structured interviews with HCC staff members from predetermined departments, and examine documents that I believed would be relevant to my overall area of interest, that is, texts, discourses and power effects. Furthermore, my interest in the actions of local government meant I needed to understand that discourses, and their analyses, are connected to politics through power and the positions it generates for subjects (McHoul & Grace, 1998). Employing Foucauldian 'tools' certainly facilitated my analysis of data. In particular, a Foucauldian approach helped me identify various discourses, examine how they interact, and discover how they shape subjects, objects and practices through operations of power. Drawing upon interviews and documents, the following two chapters shed further light on the factors that influenced local government decision-making and the consequences for urban active living via the case study of the Hamilton City Council.

CHAPTER 5 – ACTIVE CITIZENS, PROSPEROUS CITY: ANALYSIS OF DOCUMENTS, FINDINGS AND DISCUSSION

In this chapter I describe, review and analyse some of the main HCC documents that I consider to be relevant for the development of built and social environments in supporting active living. Following Prior (1997), I believe that "texts can constitute a starting point for qualitative analysis in their own right" (p. 65) and can reveal discursive rules that work to produce knowledge. My aim is, therefore, to analyse selected publicly-available HCC texts in order to identify various discourses and discursive rules relating to built and social environments and active living. By doing so I will be able to suggest ways that these examples of textually ordered knowledge 'instruct' us to see the world (Prior, 1997). Many of the documents selected were referred to during my interviews and therefore represent some of the most relevant documents for this study.

This chapter constitutes two main parts. In the first I describe the various frameworks, strategies and plans guiding council activities. In particular, I review HCC's relatively new strategic framework. I also describe the specific strategies that focus or have an impact on some aspect of active living, and briefly review the latest LTCCP and *District Plan* - operational documents that guide most actions or decisions. In the second part, I analyse the content of these documents and, drawing upon Foucauldian 'tools', discuss some of the discourses that may have informed or underpinned the various references to active living, or may influence active living support in the future. While this chapter details specific results derived from the data, it also serves to provide contextual information for my next chapter in which I analyse my interviews with HCC staff members. Both chapters show that data is influenced by existing discourses, such as the primacy of the scientific research, and that discourses are anonymous, not necessarily emanating from local or central government, but circulating among communities and working from the bottom up.

Guiding frameworks, strategies and plans

HCC's new strategic framework (see Figure 6) illustrates how HCC intends to work towards the 'Vibrant Hamilton' vision for the city. The vision humanises the city as an entity, describing it in terms of youth, passion, ambition and energy, and

describes some of the traits that will guide it towards future prosperity and success. The framework is designed to focus the direction of development, ensure the integration of policies and plans, and enable communication of the direction to other stakeholders, such as current or potential city residents, or investors (HCC, 2006a). The three strands of the framework symbolise key aspiration areas and each strand has a number of strategies below it that are expected to help HCC work towards the vision. Each strategy focuses on specific outcomes that have been identified as important to the city residents, the HCC and other stakeholders.

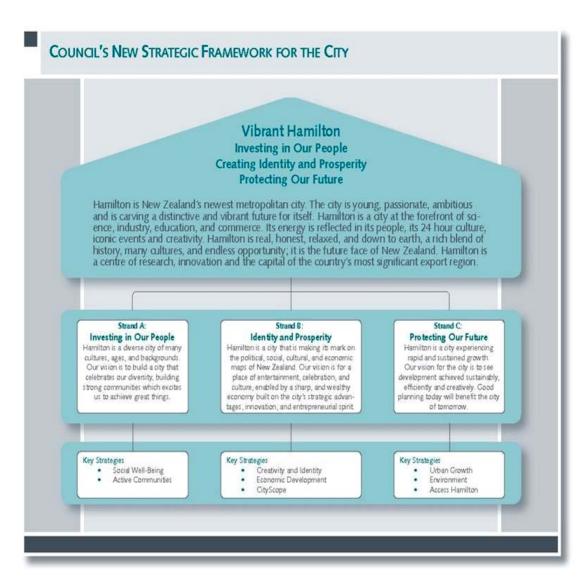


Figure 6. Hamilton City Council's new strategic framework for the city (HCC, 2006a)

The *Active Communities* strategy and the *Social Well-being* strategy (HCC, 2007a), fall under the 'Investing in Our People' strand, highlighting HCC's desire to see people become 'all they can be'. The HCC clearly believe that a prerequisite for

this potential is for residents to have a physically active lifestyle and to be 'socially connected'. While the *Social Well-Being* strategy was launched in October 2007, the *Active Communities* strategy had not yet been developed at the time of writing this thesis. The two strategies that have received the most attention are *Access Hamilton* and *CityScope/Vista*; Hamilton's transportation and urban design strategies, respectively. The *Social Well-being* and *Creativity & Identity* strategies (HCC, 2007a; 2007e) have recently been completed while the remaining strategies are at various stages of completion. For the purposes of this study, I focus primarily on the urban design, transportation, and to a lesser degree social well-being strategies. These strategies correlate directly to the active living factors of influence identified in my review of literature and also correspond to priority focus areas identified in community surveys, reflecting the urgent need to manage Hamilton's rapid growth.

The *Access Hamilton* strategy was not accessible in document form due to a re-working process, and was therefore unavailable to me. However, some of its principles and focus areas have been spelled out in previous document releases. *Access Hamilton* is an ongoing project which started in 2002/2003 with the aim of addressing traffic congestion (HCC, 2005). Its vision is: "efficient and secure access around the city for everyone, whatever means of transport they choose to use" and has an overall goal of encouraging people "to use alternative modes of transport wherever possible in order to keep the growth rate for traffic at or below the population growth rate" (HCC, 2005, p. 1). However, it is interesting that the same document notes that traffic is currently growing at a faster rate than the population.

HCC's *CityScope* strategy aims to 'raise the bar' in terms of Hamilton's urban design to better reflect "the dreams and aspirations of Hamilton's community" (HCC, 2006b, p. 3). Comparatively poor city design work has been 'allowed' to happen in the past and the desire for change is evident. The introductory statement to CityScope notes that "as we move forward we need to take a more strategic and less *ad hoc* approach to our city design and development" (HCC, 2006b, p. 1). Under the guidance of *CityScope*, the hope is that "urban form and (the) built environment will deliver positive social, economic and environmental outcomes" (HCC, 2006b, p. 2) by embracing international best practice in urban design. Two recent *CityScope*-related HCC accomplishments have been the release of the Hamilton City Design Guide, or *Vista*, and the creation of the Hamilton Urban Design Panel. The former

spells out what is meant by 'good urban design' while the latter provides opportunities for face-to-face discussions between HCC planners and developers.

HCC recently released the *Social Well-being* and *Creativity & Identity* strategies following extensive stakeholder consultation. Two of the priorities for action in the *Social Well-being* strategy are 'quality of life' and 'community safety' and key indicators for well-being are that people enjoy good health and feel safe in their neighbourhoods, which includes having a sense of community and feeling satisfied with their leisure time (HCC, 2007a).

Like the *CityScope* strategy, the *Creativity & Identity* strategy comments on the need to move away from a 'business as usual' approach. The strategy has four key 'propositions', namely the need to attract and grow talent for economic purposes, to enhance residents' aesthetic experiences, re-connect to the Waikato river (New Zealand's longest river, which flows through the city), and to make 'small' effective by retaining a 'village feel'. In essence these focus areas will look to develop economic prosperity, create sustainable 'people-oriented' spaces, help people recreate and 'commune' with the river, and retain a neighbourhood feel and sense of connectedness for residents. Not only do these strategies help to guide HCC staff in their mission to create a vibrant city, but they inform planning and policy making. The diagram below illustrates how this framework connects with other plans and policies, to 'make a difference' for city residents (see Figure 7). I will now briefly outline some of HCC's key plans.

The Local Government Act 2002 legally defines the powers and responsibilities of all local authorities including the HCC. It requires the adoption of a Long Term Council Community Plan (LTCCP) outlining intentions over a 10-year period. The purpose of the Act and the planning is to ensure democratic and effective local government and to promote accountability. The latest long-term plan for HCC spans the period 2006-16 but is reviewable every three years. HCC is also required under the LGA 2002 to produce an Annual Plan for each of the two intervening years between the three-yearly LTCCPs. Council's Strategic Framework and a range of community outcomes are identified in the Plan, and the outcomes, which are derived from external stakeholders, community consultation and other resident surveys, give rise to specific projects to be acted on. The LTCCP sits alongside the *District Plan* and other city bylaws in guiding such Council action.

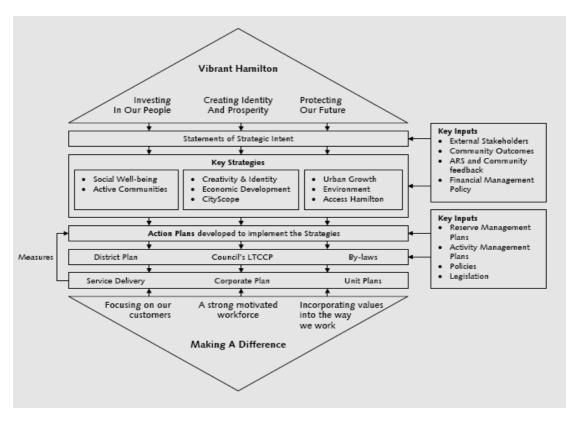


Figure 7. Hamilton City Council's relationship between the City Strategic Framework and Council's key plans and policies (HCC, 2006a)

The HCC *District Plan* is prepared under the Resource Management Act 1991 (RMA) and defines the way the city's natural and physical resources will be managed (HCC, 2006a). The Plan is designed to manage the effects of land use and development and, having a direct connection with the RMA, is required to promote the sustainable management of natural and physical resources. Because Section 32 of the RMA requires Councils to justify the objectives in their District Plans, HCC undertakes a thorough process of subject area definition, research, consultation and the development of policy papers, refined objectives and policies (HCC, 2006a). In this way HCC, in co-ordination with the community, can address local concerns regarding such active living related matters as transport and its problem areas of accessibility, safety, and ease of use of alternative (non-motorised) modes. I believe these strategies and plans deserve closer scrutiny because they help highlight specific ways of knowing, with possible consequences for the support of resident active living.

Underpinning discourses and 'truths'

In order to address my research question I examined the selected texts, looking for various discourses and discursive rules that informed any statements made about, or relating to active living. My textual analysis revealed the following dominating discourses: discourses of a nurturing council and economic rationality; discourses of the active, healthy citizen; and discourses of participative government. These discourses deserve attention because they not only reflect the council's values and priorities, they also support certain 'truths' or ways of knowing, while excluding others, which may impact future active living initiatives. While there are clearly areas of overlap, I discuss each of these discourses in turn below and examine the potential power effects of these discourses. In doing so I have kept in mind the context in which these statements were made (McKee, 2001). In general terms, this context centres on Hamilton being a small but rapidly growing city at the centre of traditional and also innovative new industries.

Discourses of a nurturing council and of economic rationality

In my study of HCC documents I found the discourse of the council as nurturer and carer of its residents, and not merely a manager of utilities, evident throughout. This was perhaps a result of the strong requirement to focus on the various 'well-beings' set out in the LGA of 2002 for the development of any long term plans. One of the well-beings is economic well-being, so discourses of economic rationality are likely to complement the discourses of the council as nurturer. For example, two of the three strands of the strategic framework refer to the future in economic terms, using the words 'investment' and 'prosperity', which are usually associated with financial wealth. Discourses of economic rationality at city council level may result in activities being undertaken with the goal of achieving a return on investment to promote resident wealth. This, in turn, could be interpreted as a form of nurturing, treating residents, as 'instruments' of wealth-making.

The discourse of local government as nurturer reflects Foucault's (1983) notion of pastoral power, which describes the traditional priestly interest in citizen welfare. Adopting a Foucauldian perspective, Bevir (1999) argues that pastoral power has become secularized over time and has led to "the state replacing the spiritual end of salvation with worldly ends such as health and well-being" (p. 351). Numerous

examples of the discourse of council as nurturer are evident in HCC's urban design texts. A Community Outcomes Programme, having input from members of the community, for example, summed up a vision for *CityScope* to work towards:

An urban environment with a strong and unique sense of place, where the interaction of people is supported by an urban fabric of places, spaces and buildings that capture a sense of vibrancy, community and safety on a truly people scale. (HCC, 2006b, p. 3)

This vision focuses on creating a more people-oriented urban environment - which is consequently reflected in the *CityScope* principles, objectives and programmes - and highlights the need to provide an enabling environment in which residents can thrive and contribute to collective wealth.

To illustrate a discourse of a 'nurturing' council, two of the general *CityScope* objectives relevant to active living are those of creating exciting public spaces and ensuring all-round functionality (HCC, 2006b), and the strategy outlines a three year plan with a variety of focus areas. Importantly, the strategy is guided by international best practice in the form of the New Zealand *Urban Design Protocol* (MFE, 2005). The extensive research reviewed by the MFE indicates that good urban design can lead to benefits including better public health and greater social equity. It is interesting to note that in MFE's document *The Value of Urban Design* (2005) many of the relevant factors for good urban design, such as connectivity, mixed use and housing density, reflect those in the physical activity-focussed literature, as discussed in Chapter Two of this thesis. In this way central government works to produce and support the discourse of the city as nurturer by showing how urban design can influence and support well-being.

Another example of the HCC as a 'nurturing' council in terms of active living can be seen in the *CityScope* strategy which aims to promote a safe environment and improve opportunities for mobility. Some of the key activity and programme areas over the next three years include a focus on sustainability, ensuring walk-ability (working alongside *Access Hamilton*), reviewing current processes that may undermine its aspirations (perhaps a direct criticism of the *District Plan*), reviewing Structure Plans for new growth areas, developing an integrated open space strategy, and ensuring *Access Hamilton* aspirations are integrated with those of *CityScope* in

terms of traffic circulation. While these aims seem, on the surface, to be wholly supportive of active living, different readings, based on the aforementioned discourses, are possible.

The shaping and controlling of social factors through urban design is not new. Rabinow (2003) explains how it has been used in the past to regulate activities, separate populations, and establish a comprehensive order. He describes modern urbanism as "a self-consciously scientific discipline – armed with sanitation, statistics and sociology" (p. 353). Continuing, he explains how Foucault noted that "certain architectural projects have been part of political strategies at certain historical moments" (p. 355). Foucault's notion of bio-power in the regulation of populations is evident here (Laurian, 2006). Therefore, while one interpretation of urban design activities to promote well-being could be that it is a 'public good', another is that it a technique used to control citizens.

Bio-power is a technology whereby power is exercised on a population with the objective of empirically knowing them in order to systematically regulate them, but also to make them flourish (Rabinow, 2003). As mentioned above, *CityScope* and other HCC urban design literature could be interpreted as echoing such a technology. Indeed, HCC's urban design strategy could also be seen as an instrument, facilitating other objectives such as growth, circulation and trade. The *CityScope* strategy, therefore, supports the urban design practice of analysing and manipulating space. The notion that space can be 'known' and used to achieve specific ends, such as civil order, is a function of bio-power (Rabinow, 2003).

Guided by the *Urban Design Protocol*, *CityScope* outlines principles concerning the use of space, and these uses include promoting public health. Therefore, it is useful for population physical activity researchers to consider how urban design strategies can work to regulate, control and 'nurture' urban citizens in *certain* ways, that is, ways which may not primarily be concerned with the promotion of active living. In the case of the HCC, economic rationality appears to be the underpinning discourse of many of the strategies, as evidenced by references to 'investment', 'prosperity' and 'protecting the future' in the strategic framework. Rather than promote physical or social well-being, this discourse promotes economic well-being as the basis for activities such as urban design.

The overt nurturing of residents, for purposes of economic rationality, may also have an 'individualising' and 'totalising' effect (Gordon, 1991). 'Normal'

citizens are responsible and act to ensure they play their part in the creation of collective prosperity. The importance for active living is twofold; it marginalises behaviours not considered efficient or productive, and excludes other ways of talking and thinking about urban citizenry. For example, although physical activity, active transport and active living are promoted, it may be only primarily in the service of economic rationality. Walking and cycling to work are still considered 'alternative' forms of transport, compared to motorised forms. Furthermore, getting around the city quickly is prioritised by focussing on congestion minimisation. This characterises or constructs walking and cycling as unusual and perhaps inefficient, while motorised transport is privileged. Consequently, physical activity and active living can be considered things best carried out in leisure time, in order to recreate.

Discourses of economic rationality, especially if fore-grounded in public statements such as city strategic frameworks, can therefore have implications for active living by promoting the importance of tangible, measurable returns on investment, returns that will help the city and environs prosper. They may constitute normalising processes whereby citizens' individual responsibilities are emphasised and shaped, in ways that promote capitalist endeavours. This is not, however, a particularly new phenomenon. Foucault (1980b), for example, noted that control and repression of human bodies has played a fundamental part in maintaining the power required for the growth of industrial capitalism since the eighteenth century.

In *Discipline and Punish* (1975), Foucault was fascinated with how forms of power/knowledge – such as various local government discourses and associated practices – impacted humans beings by disciplining bodies and shaping behaviour, thereby manufacturing *subjects* (Prior, 1997). My analysis of HCC documents reveals that the controlling of bodies and manufacturing of subjects is still occurring, albeit with a subtler form of power relations 'working' to normalise and individualise citizens. City residents appear to be constructed primarily as potentially productive citizens, and they are being 'nurtured' by a caring governmental administration.

HCC's strategic framework and vision make it clear that the city 'operates' within a competitive environment and that it has considerable 'unrealised potential'. The desire to attract productive, skilled, innovative, responsible and hard-working residents relates, in my view, to a wider climate of inter-city competitiveness. In a sense, Hamilton city is competing with other New Zealand cities, and even cities in other countries. The objectification of the city as a business, in a modern sense, means

that efficiency and effectiveness become paramount, as does providing added value for its 'customers', that is, the rate-payers, various businesses or organisations, and investors or developers. Questions arise as to what it is that constitutes value, and what price will be paid for continuous improvement efforts.

The competitive operating environment is another example of the dominance of discourses of economic rationality which subjectifies residents as useful, in economic terms. Indeed, residents are both producers and consumers of the city's goods and services, including physical activity and recreation opportunities; in such a competitive climate, the HCC may even consider recreation facilities, such as parks, playgrounds, cycle paths and riverside walkways, as important for attracting 'customers' to the city. The subjectification process, however, has the potential effect of recognising certain forms of physical activity, such as recreation from work, and exercise for fitness and health, as being more valid than others, such as cycling to work or school. This could be seen as having the effect of narrowly defining specific, 'useful' forms of physical activity that work in the service of economic rationality. Therefore, being active and healthy is constructed as the duty of every 'valued' resident.

Discourses of the active, healthy citizen

Another prevalent discourse apparent in the documents was that of the active and healthy citizen. HCC's plan to develop a strategy focussed on facilitating active communities certainly appears to reflect a particular desire to have healthy residents. Most of the references to physical activity in the documents I examined connect it to health benefits (rather than, for example, enjoyment or utility). For example, 'alternative modes' of transport, as mentioned in the *Access Hamilton* strategy, are considered healthy choices. The strategy vision implies a desire for parity between motorised and non-motorised forms of transport, whether on or off-road, and has a very specific goal which will necessitate the careful monitoring of various modes of transport. HCC intends to use travel demand management techniques to address the potentially conflicting priorities of enhancing circulation and promoting walking and cycling. While the strategy aims to work on key roading projects to ensure that traffic flows freely, it will also promote public transport and cycling and walking, which are considered "healthy choices that contribute to a low pollution environment (and improve) the personal health of the city's residents" (HCC, 2005, p. 2).

HCC's *Access Hamilton* informational leaflet (HCC, 2005) identifies the reduction of congestion as a vital city goal. Congestion minimisation will ensure that people's lifestyles and the commercial strength of the city and the region are protected. Enhanced traffic circulation therefore promotes economic wealth and desirable lifestyles, and walking and cycling seem to be important for helping ease congestion, while at the same time enhancing resident health. The strategy does not promote walking and cycling as the key to congestion minimisation, but rather as merely a part of the solution by helping to enhance traffic circulation. Furthermore, the strategy makes the city's economic strength and the protection of lifestyles the focal outcomes for action, which implies that residents should try to walk and cycle whenever possible primarily to protect and enhance the local economy. The utility of active transport, is therefore, somewhat unclear; on the one hand HCC documents highlight the goal of developing an active and healthy citizenry, but on the other they promote the 'sacrifices' needed to avoid congestion and therefore 'diminished' lifestyles.

Access Hamilton speaks of the difficult goal of ensuring the city has a comprehensive, legible and practical road network for motorised vehicles, while at the same time seeking to change driver attitudes so they embrace other modes of transport. These goals are not seen as mutually exclusive although, logically, facilitating better road travel for cars may have the effect of encouraging driving and discouraging 'alternative' modes, and therefore active living. However, the strategy recognizes that an integrated balanced approach will be necessary to effect change in the long term. This, at least, emphasizes the failure of the 'predict and provide' road construction approach used in the past, the type of approach criticised by Bachels and Newman (2001) as being short-sighted. Indeed, while road construction projects have intensified, for example the push to finish the city's ring-road, efforts to promote bus usage have also increased (HCC, 2006). The active, healthy citizen could therefore, through a competing discourse, be defined as a highly mobile and *economically* healthy one.

Evidence of discourses of the active, healthy citizen can also be found in the urban design strategy. The *CityScope* strategy, more than the others, appears to focus on correcting and protecting. It recognises the long-term consequences of past *ad hoc* planning and design decisions, while establishing guidelines and prerequisites for the future. An element of this focus is the creation of 'healthier' spaces, places that are

safe and conducive to interaction. This important goal is echoed in the aspirations of the *Creativity & Identity* strategy. For example, the desire to create people-oriented, engaging, and sustainable spaces is reflected in the following goals:

We want to have the quiet tree lined street with quick access to global markets. We desire a place of repose as well as a place of activity. When developing buildings, streets and other hardware, the real focus is not on the physical objects but on the human relations.

This 'best of both worlds' objective highlights broader societal concerns for achieving balance, and for pursuing personal and economic health and wealth, but in a sustainable way. Moreover, this example illustrates the interesting nature of discourses of nurturing council, economic rationality and the healthy citizen.

The principles of 'good urban design' are guided by central government, and the social equity and public health related outcomes reflect renewed interest by urban planners in matters of public health. The desire to encourage good health and social cohesion through urban design and other local government activities is also emphasized in the *Social Well-being* strategy. This strategies' key goals of good health, safety, a sense of belonging and an overall satisfaction with leisure time reflects a concern by HCC to have residents fully able and willing to engage in work, study and community matters, in other words, to be actively participating citizens.

As previously mentioned, Foucault (1978) believed that the control of the body plays an important part in the maintenance of power needed for the growth of capitalism. The HCC documents offer evidence that such control continues to be in effect. Residents are encouraged to live active lives and monitor their health in order to contribute to their communities. This has the effect of encouraging self-discipline and constructing active living in moral terms; the active, health-conscious citizen is constructed as 'virtuous' while the inactive one is 'sinful' (Becker, 1993; Gillick, 1984).

In summary, discourses of active, healthy citizens work to subjectify residents, encouraging them to "construct themselves as subjects with a 'correct' concern for the 'proper' way of behaving" (Coveney, 1998, p. 460). The desire to promote active living evident in the documents I examined can be understood in political terms as a neo-liberal practice, helping in the exercise of power of the self (Fullagar, 2002). The

Foucauldian (1991) concept of governmentality is also relevant in that it sheds light on how these constructions of knowledge about citizenship constitute tactics or techniques that shape beliefs and control the population. Ironically, it is a sense of citizen control that the HCC emphasizes through its practices of resident consultation and participation.

Discourses of participative government

The documents examined for this study indicate a desire by HCC to engage with all city residents to ensure any decisions are democratic and reflect, whenever possible and practical, the dreams and aspirations of Hamilton's communities. At no point, however, did I find a definition of the term 'community', and there were no indications how HCC would ensure that democratic processes of community consultation were not over-represented or manipulated by certain interest groups. Nonetheless, there is a strong focus both on community consultation and sustainable development in HCC documents and policies. This is due, in large part, to the introduction of the LGA 2002 and the LTCCP process, which emphasise these practices.

Through processes of consultation HCC wants to ensure that residents feel they have a say in city matters, thereby giving them feelings of ownership as stakeholders. As customers, residents can press to have their needs met and ensure they get 'good value for money'. An unhappy customer/resident could otherwise simply take their 'business' to a competing city. Key elements in the relationship between HCC and its residents are those of choice, agency, and freedom. Rather than dictating what work is to be carried out, HCC must show that it consults widely in matters affecting residents. The process of determining desired community outcomes reinforces the validity of HCC actions.

The dreams and aspirations of city residents are translated into planned actions via the Community Outcomes process. Some of the actions reflect community dissatisfaction with previous HCC efforts, which some see as having led to unsustainable practices, poorly planned suburbs, and communities that are unsafe and lacking community spirit. Hamilton's Community Outcomes were developed, according to the Local Government Act 2002, to identify priorities for the future of the city with a focus on sustainable development.

The process of identifying desired outcomes started in 2004 and was completed in 2005, culminating in the publication of Hamilton's Community Outcomes and Emerging Priorities. Three of these outcomes are particularly relevant to active living and include creating a city that is sustainable and well-planned, is focused on safety and community spirit, and in which people are happy and healthy. It is further envisaged that Hamilton is a city that protects and enhances green spaces, has safe roads for all users, and provides opportunities for people to access and participate in sport and leisure (HCC, 2006a). In broad terms, the emerging priorities focus strongly on cycleways, safety, community spirit and urban planning (HCC, 2005). The Strategic Framework works to satisfy these Community Outcomes through the various services existing within HCC. Furthermore, community input is translated into action plans, which then seek further community input in terms of implementation. Examples include both the Social Well-being and Creativity & *Identity* strategies that have strong visions for the future and set out projects that rely on community leadership and collaboration, such as community renewal and independent living for older people projects.

Community consultation can influence HCC planning and action by changing the Annual Plan. The process of developing an Annual Plan suggests that any predetermined actions concerning specific desired community outcomes can change according to circumstances and are not set in stone for three years. For example, it is possible that the *City Heart Revitalisation* project – a project which commenced in early 2007 and aimed to create a more vibrant CBD - may generate public enthusiasm and be pushed forward in any agendas for action. The project invited public consultation and input with a strong focus on creating vibrant places of meeting, enjoyment and interaction. It is encouraging to note that this project places an emphasis on physical activity, safety and pedestrian accessibility.

The proposed Annual Plan 2007/2008 shows desired changes of direction since the LTCCP was put in place. A number of variations were proposed to the LTCCP, many of which involved urban design, active transport and the refinement of Community Outcome progress indicators. The proposed plan reinforces Councils strategic direction developed earlier. Both the LTCCP and Annual Plan must conform to the requirements of central government Acts such as the Land Transport Management Act and NZ Transport Strategy in promoting non-motorised transport. For example, walking and cycling must be factored into every scheme, overriding any

consultation outcomes to the contrary. In other words, central government directives will theoretically trump community wishes when conflicts arise.

Changes to the HCC Proposed *District Plan* are achieved through a 'variation' process, which is an alteration to a proposed policy statement, plan, or change under the RMA. The variation process requires public submissions from various stakeholders before they are approved and eventually 'beyond challenge'. District plans are, therefore, contestable but can undergo long-winded variation processes, having implications for community outcomes and strategic plans. Community consultation, through the variation, can ironically greatly hinder or even scuttle predetermined desired outcomes or strategy effectiveness.

Foucault helps us to think about these participative processes, involving relatively autonomous and free residents, as rather illusory. Having the choice to contribute to local community affairs arises from a particular understanding of freedom (Coveney, 1998). While the LTCCP process emphasizes participative government and thorough community consultation to ensure adequate consideration of community needs, the process may result in residents actively participating in their communities "in order to identify problems and then reflect on the consequences for themselves and for others" (Coveney, 1998, p. 464). While seeming to promote community input into council decision-making, such as the development of activityfriendly suburbs, consultative processes may result in minimal or non-representative participation and the promotion of self-regulation and control through self-reflection. Participative government, by fostering the development of self-reflective members of 'competent communities', may have unintended consequences in the form of residents scrutinising their own, and others' activities, resulting in power being exercised at a minimal cost (Foucault, 1980d). This alternative interpretation of the effects of participative government challenges the taken-for-granted view that consultative government invariably benefits all city residents and should be considered by researchers and practitioners of population physical activity.

Summary

In this chapter I have drawn upon a Foucauldian approach to describe, review and analyse key HCC documents with a view to determining possible implications for active living. The documents provide a picture of how HCC views its own role in

general, and specifically in terms of the roles of city residents as 'customers' to be 'nurtured'. The HCC, like other New Zealand city councils, has a vision for the future, one that has been developed in conjunction with some of the city's residents. The vision portrays the city as a business entity, with HCC as a type of manager or entrepreneur. To succeed in the competitive arena of acquiring or nurturing skilled and talented residents, HCC needs to focus on the areas of social support, safety, and health, as these factors are more likely to create contented and productive residents. By promoting active living HCC can create and maintain environments conducive to health and well-being, which not only looks after current residents but may also attract new 'customers' and stimulate the regional economy.

While the available documents paint a picture of a council 'doing all the right things' to promote active living, my analysis highlights some discourses that promote competing views and different interpretations that can be considered being at crosspurposes. Discourses of economic rationality and council as nurturer, for example, emphasise a specific value and utility for physical activity, whereas many instances of active living engagement are purely intrinsic in nature. The discourses I have discussed may have effects in terms of shaping the behaviours of residents but it is important to remember that these power effects are not imposed from above by the HCC. Foucault (1980d) reminds us that power is everywhere and that it operates from the bottom up. Therefore the HCC documents not only reflect existing, already circulating discourses, but also help to maintain, reinforce, and further circulate these discourses. Broader societal concerns, such as personal health and leading an active life, as discussed in Chapter Two, are therefore reflected in HCC texts.

While investigating the multiple discourses inherent in HCC documents is an insightful activity, it is also necessary to examine the views of staff members working within council to expand on these interpretations, a task which I carry out in my next chapter. As I will illustrate, many of the discourses observed in the documents also featured in my conversations with HCC staff.

CHAPTER 6 – RECONCILING IDEALS AND REALITIES: ANALYSIS OF INTERVIEWS, FINDINGS AND DISCUSSION

In addition to the selection and analysis of HCC documents I undertook interviews with key HCC staff members. In this chapter I discuss the interview data and draw upon a Foucauldian perspective to discuss my findings. More specifically, I discuss my findings in relation to the various discourses I found to be underpinning the statements made. The responses elicited reflected the participants' own ways of knowing with regard to the topics covered. While individual differences were apparent in responses, here I focus on the specific discourses that arose consistently among the participants. The discourses emerging from interviews included: discourses of economic rationality; discourses of safety and surveillance; discourses of health and active living; discourses of participative government; and discourses of work efficiency. These discourses helped structure the staff members' statements and highlighted dominant ways of knowing, despite varying positions within each discourse. The interviews also revealed various discursive effects and consequences for the promotion of active living.

From a Foucauldian perspective, the key to understanding an institution is to understand the ideas or concepts that give it its character (Bevir, 1999). I attempted to capture these ideas by talking to staff members and identifying discourses. For each of the discourses I will describe the positions taken by the staff members and illustrate, through the comments made, how the discourses informed their statements. I will then, using Foucault's ideas about the workings of power, discuss how the multiple discourses appear to be inter-related, working to influence planning, decision-making and action around active living through specific tactics and techniques. This approach also encourages me to consider how other ways of thinking may have been obscured, silenced, or negated by the dominating discourses. I will, therefore, also examine what was not said. In other words, I am interested in the strategic use of discourse and how the same discourse can be used to sustain different arguments.

Identifying discourses and discussing techniques and power effects that have an influence on active living initiatives brings about an awareness of the forces that help to bring about the effects. For each effect I therefore discuss how the influencing discourses may have come about and gained strength and credibility, and who it is

that could benefit the most from their maintenance and perpetuation. I also highlight the challenge for HCC staff members who are trying to achieve specific goals, despite the influence of these discourses. In doing so, I illustrate some of the complexities for HCC staff working within such discursive power relations. Undertaking this analysis will help me to identify any obstacles standing in the way of promoting active living in the city, but also to think about the techniques and tactics of population behaviour control evident and the implications for residents and for my own thinking in terms of physical activity promotion.

This chapter consists of five sections, each part examining one of the various discourses identified in the interviews with HCC staff. I have made use of the rich interview data and include the voices of HCC staff members throughout this discussion. To protect the anonymity of staff, I use the following pseudonyms: Sam (Roading and Transportation), Don (Community Development), Peter (Urban Design and Planning), James (Leisure Facilities), Leanne (Sustainable Development), Mark (Parks and Gardens), and Kevin (Parks and Gardens). As mentioned earlier, after gaining approval from HCC management, I organised interviews with each staff member using interview guides (see Appendix A) developed separately. I asked staff members in turn what their jobs entailed, how they went about their jobs, and how their activities considered active living opportunities for Hamilton residents. This chapter, therefore, tells the story of those interviews.

Discourses of economic rationality

I began each interview by describing my research, indicating that I wanted to know about the multitude of factors that contributed to decision-making in terms of the areas linked to active living. Even though I devoted a small amount of time to discussing funding and economic considerations, staff members tended to highlight these considerations throughout, paying particular attention to the various impacts of private sector development and the need to spend rate-payers monies responsibly. Because of this focus on economic considerations, I will start this chapter by examining and discussing evidence of discourses of economic rationality.

The tendency to value decisions based on 'sound economic reasoning' was evident throughout my interviews, but nowhere more so than when discussing the activities of private developers. Although there were conflicting views about private

sector development, and consequences for active living, the dominant view was that developers were primarily concerned about their own profits. Discussion topics that reflected this view included subdivision layout, developer concerns about costs and contributions to HCC, building design, and adherence to the minimum requirements of the *District Plan*. This discussion consists of two parts: first I examine private sector development, and second I examine the cost of creating activity-friendly environments.

Private sector development

Discussions with HCC staff revealed fundamental philosophical differences between the goals and purposes of local authorities and those of private developers. Here I will consider such differences in relation to the development of subdivisions, the difficulty of retro-fitting, levels of developer influence, and neo-liberal primacy, respectively. Surprisingly, there were many expressions of dislike for various private sector developments. Subdivisions in the north east of the city, started 10 to 15 years ago, were criticised by Mark as probably "the pits" to live in, and by Kevin as having "illegible" roads. These are references to more or less gated, sprawling subdivisions and the road systems that connect them. This means greater driving distances and less walk-ability due to poor connectivity and relatively low density development. Peter observed:

What tends to happen is sadly, because it is easier (and) it is financially more profitable, a developer will use the same off-the-peg building design, as you will see in many areas of Rototuna, which they know that works, because it provides them their biggest return for the area they have, in terms of how many sections they can fit round a cul-de-sac and they know it sells.

This observation suggests that, in hindsight, the structure plan for that particular stage of the development was inadequate. When I suggested that developers were simply responding to demand Peter noted:

...they (developers) say 'well, we build what people want', and I say 'well no, people want what they get given, if you change what's on the shelf then people want something different'.

These comments reflect a belief that, where possible, developers will proceed with development that gives them the greatest return on their investment, preferring to avoid design features that add long-term community value without immediate short-term benefit. Don's comment that "developers, by and large, aren't the most socially minded, socially driven part of the population" sums up this difference, making it clear that some staff believe developers are driven primarily by financial motives. As private business entities this is understandable, so the problem for HCC becomes one of encouraging a particular style of development. In terms of active living, these findings mean that developments will not always be 'activity-friendly', being relatively poorly connected, sprawling, zoned for single-use, and having distant areas of employment and shopping. These design deficiencies have both short and long-term effects.

The design and placement of relatively permanent city structures such as roads, footpaths, cycle lanes, parks and buildings is vital because of the great difficulty in making changes at a later stage. Such changes, known as retrofitting, are difficult and expensive but are to some degree unavoidable because of unforeseen changes and trends. Nevertheless, it is likely that adhering to urban design principles, as laid out in the *Urban Design Protocol*, will lead to better long-term design and less need for retrofitting. While talking about some of the barriers to introducing more activity-friendly features Mark cited the fixed nature of the "existing urban fabric", again emphasising the difficulty of making changes post-development. It was hoped that re-education, as opposed to regulation, through the use of design panels and design guides, and early meetings with developers would catch some of these issues.

The differences of purpose between developers and HCC gave rise to various 'power struggles'. When asked if they thought developers had too much influence over urban design Kevin responded: "I don't think they would say that (but) yeah, they do have a lot of influence". Kevin added to this picture of corporate influence noting that in-fill development was a corporate driven strategy with "big players" capable of "stirring the agenda". Developers were also said to "cry poor" and object to the level of their contribution levy claiming it strangled development. This could be

taken as a threat to not develop in the city, perhaps taking their 'business' elsewhere. It was clear to me that HCC staff members often needed to walk a fine line when dealing with developers, securing investment and growth, but encouraging sustainable practices.

I queried the level of influence of developers further, suggesting that the HCC could bring in regulations forcing developers to adhere to certain principles. Peter commented that "the non-regulatory method is just as important because in my mind that's the quickest route to trying to achieve some of these outcomes". He went on to advocate persuasion and encouragement further:

Again it is (a) mindset and a lot of the arguments we have with developers at the moment is, yes, it will cost you more to design that road differently...but over the long term what you are building there lasts long after your current tenants have left...

While concept of 'good design' is based on central government guidelines and consultation with stakeholders, simply encouraging good design may not be a very effective strategy considering the current version of the *District Plan*. While discussing past developments Peter noted:

In my mind it is not acceptable to have buildings which don't address the street, it is just not acceptable anymore and I think...those are going to be the challenges because in terms of Hamilton, in the city, a lot of development is already in place.

Clearly there is a great deal of dissatisfaction with past development and a recognition that once structures such as roads and buildings are in place it becomes difficult to incorporate good 'activity-friendly' design features around them.

It is ironic that developers can require purchasers to adhere to building rules by imposing covenants to protect surrounding property values, but local councils have less power to require developers to meet certain standards. Such a development requirement could constitute an expression of 'collective valuing', being a reflection of minimal standards for 'liveable' communities. In other words, if residents prefer walkable neighbourhoods that are safe, close to employment opportunities and have

good transit linkages then these needs should be reflected in development standards. This situation reinforces the idea that "private actors motivated by profit can...work to manipulate choices and mould society but people, through their government, working in the name of health, cannot" (Burris, 1997, p. 1609).

The conflicts of interest between private interests and HCC represent a disparity between free market and public sphere values and practices, which is a political issue. Siedentop (1996) suggests politics in Westernised countries are often conservative and oriented towards individual interests and the private sector rather than collective interests and the public sector. Hamilton's recent suburban expansion suggests a similar trend based on the proliferation of, sometimes gated, subdivisions. In order to achieve a better balance, Engwicht (1992), advocates a variable charge for developers, depending on the 'friendliness' shown towards pedestrians, cyclists, and neighbourhoods in general. Benedict and McMahon (2006) prefer protection against development through a commitment to 'green infrastructure'; a strategic approach to land conservation and land-use planning that is good for nature and people. Sturm (2005), however, recommends a more collaborative approach with those in the private sector, recognizing such an urban planning dilemma as a market failure.

From my discussions with HCC staff, I formed the impression that developers would only be willing to support more activity-friendly design if it could be shown that they were as, or more profitable than what was currently practised. However, Peter reported that some developers were in fact embracing the values of good urban design and were using it as part of their marketing material, 'selling' the living environment as well as the land and house packages. On the whole, staff members reported that cul-de-sac type suburbs were the most popular with developers. Developers were said to promote such suburbs by pushing the idea that people do not want to live in through-traffic streets anymore, for safety reasons. It is not known if cul-de-sac streets are any safer than conventional ones, so this could be a case of developers fabricating a demand based on the promise of safety.

The influence of profit maximising development highlights a discourse of economic rationality linked to the promotion of an unregulated free market. Brown (2003) uses Foucault's concept of governmentality to examine neo-liberalism and the promotion of free market rationalities in all spheres of life. She argues that neo-liberalism acts upon societies as a form of political (as opposed to economic) rationality, and as governmentality, neo-liberalism "produces subjects, forms of

citizenship and behaviour, and a new organization of the social" (Brown, 2003, p. 4). In other words, neo-liberal rationality not only foregrounds the market, but extends and disseminates market values to all institutions and social action (Brown, 2003). Local governments, such as the HCC, should therefore be aware of this 'creep' of political rationality into policies, plans and practices. I observed such an extension of market values at a recent HCC meeting (23 January 2008) promoting plans for CBD redevelopment. CBD revitalisation proposals were often couched in economic terms and changes to roads or meeting places were mainly measured in terms of ensuring traffic circulation or attracting visitors and investment. This prominent concern with economic growth and cost containment was also highlighted in discussions about HCC expenditure on activity-friendly infrastructure.

The cost of activity-friendly environments

Like developers, the HCC weighs up matters of cost for any works programmes including those for cycle lanes, parks, playgrounds and walkways. Some of the comments regarding the provision and funding of such facilities and infrastructure were to be informed by a business-model discourse of getting 'value for money'. The intangible benefits of active living seemed to be of lesser value due to an arbitrary cost-benefit conversion, with expected rate-payer reaction in mind. In other words, HCC was mindful of spending rate-payer money wisely, knowing it would be taken to task if it did not. As I explain below, some of the staff members indicated what they thought 'wise' expenditure entailed, while at the same time suggesting the proper role of council.

There was a general consensus that the modern council is more than just 'roads, rates and rubbish'. However, interviewees expressed some contradictory understandings of role, responsibility and commitment in terms of active living. Some believed that the role of HCC was to provide facilities that would likely be utilised by the public, such as parks and pools. The HCC in many cases provides a subsidised public service in terms of active leisure such as its 'Partner Pools' initiative to make it easier for people to access a local swimming pool over summer. However, some staff did not seem to think it their role to promote physical activity or to fill those facilities. Conversely, others believed it was time to provide added-value by re-thinking the provision of established facilities, such as parks and playgrounds, to increase utilisation, and perhaps move to a 'pay-for-play' system. Mark noted:

I think we are a more 'pay for play' sort of environment now and to a certain extent the family group kicking a ball around is diminished and people are more willing to pay for some embellished leisure activity or previously provided activity on a public space.

Cost was associated with perceived value and seemed to be a key impediment for investment in activity-friendly infrastructure. For example, in terms of cycle lanes Mark commented: "it's more economically feasible to provide a lane on a road than a green fields development on a park and the cost-benefit ratio is a lot higher for that because obviously you have got less capital investment", therefore "you are getting a lot more bang for your dollars if you put cycle lanes on roads". The establishment of separate cycle paths was seen as encouraging a parallel network, something considered too costly and complicated for Hamilton, despite it being a widespread and established practice in many European countries (e.g., The Netherlands, Germany). Perhaps increased public demand and pressure may bring about such changes in Hamilton in the future.

The benefit side of the cost/benefit equation in terms of safety, enjoyment, health or cycling promotion was not quantified and was, at times, dismissed by HCC staff. Clearly cycle lanes on roads are better than no lanes at all but a cost/benefit type of analysis can marginalise cycling to an incidental form of transport rather than a legitimate mode of travel in its own right. The mere requirement to consider cyclists and pedestrians in any roading developments hardly inspires confidence that active modes are valued. Sam's comments below perhaps reflect the view that active modes necessitate extra consideration and expense:

There is a huge investment in roading in Hamilton at the moment. While that doesn't necessarily reduce traffic volumes or congestion, (in terms of) the conflict between non-motorised modes and motorised modes, at least the new schemes do consider the impacts.

With the exception of funding from the Land Transport Programme, payment for HCC initiated activity-friendly infrastructure is derived from local taxes in the form of rates. Contributions also come from developers in the form of levies. But

good urban design has a cost due to its principles to ensure functionality, aesthetics and longevity. Features of good design such as public spaces or connecting roads can be justified by a council but may be opposed by developers, investors and rate-paying residents who may have other priorities and find it hard to relate to the long-term benefits of good design. An example of competing priorities and interests is the HCC decision to pursue and then secure the rights to host the *V8 SuperCars* race for 2008. This may be regarded as a worthwhile investment by motor-sport fans, the HCC, and certain hospitality-related businesses, but the race may only benefit those particular interests, with little 'trickle-down' effect (Schimmel, 2001). Nevertheless, all city residents are being asked to subsidise the event through their rents and rates.

Despite the various philosophical differences among HCC staff, the area of active transport is benefiting from recent resource increases, both in terms of staffing and funding. Potentially, \$1.5 million can be spent every year in Hamilton on cycling and walking infrastructure, which is a combined fund from HCC and Land Transport subsidies. This seems considerable, but less so when compared to the \$20 million HCC is set to spend on new roads in the 2007/08 year (HCC, 2007d). Indeed, the funding for cycling represents 3.6 per cent of the anticipated roading expenditure. Spending on cycle racks also seems to have been low over the years with spaces for only 750 cyclists in the city, a relatively low figure for a city of 134,000 residents.

Reducing the amount of on-street parking was seen as a tool for reducing the tendency to use cars for short trips and to promote cycling through the insertion of cycle lanes. HCC has a Parking Management Strategy but, curiously, one of the newest central street developments in Hood Street has retained on-street parking, despite the nearby location of a recently built parking building. While this would have been a prime opportunity to create a vehicle-free (with the exception of service vehicles, buses and bicycles) pedestrian mall, it is not the first time that plans for pedestrian-only malls have been mooted and then abandoned, as illustrated by past plans for Victoria Street and the river frontage (see Appendix B).

Initiatives such as the reduction of on-street parking have met with resident opposition, highlighting a focus on protecting personal property values while keeping an eye on how their rates are being spent. Leanne noted that using rates to encourage active living was seen by some residents as a cost problem: "Is it reasonable to expect your rates to cover that? Can the population afford that? Generally the population is saying 'No, we can't afford that, we can't afford our rates to go up'". There are

clearly people who believe that supporting active living is a good idea, as long as the cost is not prohibitive.

Contestable funding and budgetary constraints were also seen as impediments to promoting active living and were in part due to having to comply with central government legislation. Regular legislation changes were said to have the effect of adding to workloads and stretching resources, leaving matters such as active living down the priority list. Furthermore, staff time and staff capability were impediments. According to some HCC staff, if there was more money, say from central government, then more projects would be completed. Leanne lamented: "it is great having these strategies…but…we have to put a lot of staff time into that which means we don't have time to actually do the projects".

Aside from prioritization, there was also a dominant mindset amongst interviewees that Hamilton and the HCC were doing, comparatively, quite well. Indeed, they believed that Hamilton was doing as well, if not better than other New Zealand or even some international cities, and that perhaps the need for expenditure or commitment was not so urgent. I found that, in general, staff members believed behaviour change through experience or attitude adjustment were just as important, and in some cases, even more important than environmental change. Interestingly, this is contrary to the research findings identified in my literature review and perhaps reflects a persistently strong discourse of individualism. Programmes such as *Safer Routes to Schools* highlight the accepted practice of investing in such behaviour change initiatives, in this case promoting walking and cycling for school children. With regard to a supportive built environment, there was an overall attitude of 'something is better than nothing'. Furthermore, my enquiries failed to uncover any efforts to examine the structural and environmental roots of physical activity problems with an eye to addressing them in some specific way.

In sum, the discourses of economic rationality, both in terms of developer interest and HCC cost awareness, have implications for active living mainly due to a focus on extrinsic monetary values over and above all other values. Although the HCC manages development through the use of structure plans, and all parties are guided by the *District Plan*, I found that developers had a considerable say in terms of street layout, between-street connections, parks, and other design features. My findings revealed that a strong developer influence in matters of building, site, or

subdivision layout or design often resulted in adverse long-term consequences for active living opportunities.

Developers, understandably, are mainly interested in achieving the greatest return on investment possible, but this focus clashes with HCC and community desires to create 'liveable', activity-friendly communities, and represents a form of power struggle. The HCC wishes to promote and establish places with high connectivity, attractive parks, accessible playgrounds, local meeting places and shops, nearby places of employment, and relatively close public transport services. However, many of these elements can be compromised by developer influence. Unless it can be shown that activity-friendly development can be equally profitable it is likely that developers will continue to plan subdivisions with the maximisation of profit in mind.

However, as mentioned earlier, recent structure and neighbourhood centre plans (see Appendices C, D, and E) have specified various elements supportive of active living, leaving fewer opportunities for developers to influence activity-friendly design elements. Furthermore, it is perhaps unreasonable to focus solely on developer activity when past HCC structure plans have allowed inferior development to proceed. My findings reveal that poor structure planning can become a legacy leading to assorted future problems including the need to retro-fit streets. My interviews and textual analysis revealed that HCC was making concerted efforts to influence urban design, encouraging and advising developers via various means, including an urban design panel.

While discourses of economic rationality took many forms, they were apparent in all interviews. I was surprised at the lack of acknowledgement by the interviewees of the potential influence of these discourses and the possibilities of promoting alternative rationalities, such as sustainability. Dominating discourses of economic rationality are driven by neo-liberal concepts of value and how a society ought to function. The market individualism promoted by neo-liberal politics tends to obscure market failures such as the lack of cycle paths or roads that are dangerous for cyclists and treats these situations as invisible externalities that the market may address, at some point in the future (Burris, 1997). In terms of the development of supportive environments for active living, discourses of economic rationality may also work to commodify active living and health, making them products to be consumed and only available to those who can afford them (Gard, 2004). HCC has undoubtedly been influenced by power relations and discourses of economic

rationality, but power is also produced by HCC activities, which I consider further in my discussion on safety and surveillance.

Discourses of safety and surveillance

Any promotion of active living in an urban environment needs to consider resident safety, and it is no surprise that this topic featured heavily in interview discussions. Discourses of safety and surveillance informed topics as varied as active transportation, cycle network planning, personal and property security, and environmental or aesthetic influence on behaviour. Understandings of safety and surveillance have their roots in transportation planning and urban design but the subjectivity of experience means that other effects can arise if action is not carefully considered. Effects could include under-investment in traffic calming measures or vehicle-free zones and the curbing of privacy for some residents.

Safety

In my interviews, responses about safety often referred to cycling and walking in terms of interaction with motorised transport. As mentioned, when I discussed matters of pedestrian and cyclist safety we invariably ended up talking about other cities for reasons of comparison. I found that comparisons tended to prevent progressive thinking due to cycling being juxtaposed with traffic congestion. Other cities were described as more congested and therefore more dangerous to cycle around than Hamilton, resulting in the false conclusion that Hamilton is relatively safe. Making a comparison with a large and busy European city may not help to objectively assess cycle safety in Hamilton. Illustrating the dangers of cycling, Peter noted that Hamilton is "a very car-dominated city, frighteningly so in many cases", referring specifically to "how wide the roads are and how little respect there is for pedestrians". Kevin commented that "it is pretty scary riding a bicycle around parts of town. I don't think there is any doubt about that". So it is perhaps a safe city in comparative terms, but relatively unsafe in practice.

Perceptions of safety may be influenced by environmental cues such as road widths, speed limits and a lack of foot or cycle paths. These cues can in turn have implications for resident behaviour. Having cycled in most parts of the city I suggested that in some areas it was as though cyclists were not welcome. For

example, many Hamilton roads include parking on both sides of the roadway, leaving only enough room for cars or trucks to travel in either direction on the remaining surface. As a cyclist, I am often aware that by being on such roads I am holding up traffic behind me and speed up so that I am not inconveniencing them for too long. Some of the staff agreed, adding that they had also experienced this feeling as pedestrians. The allotted four seconds walking time at automated pedestrian crossings made Sam feel he should "get off the road" or not be there at all, adding "it all makes...you feel like you're at the bottom of the ladder I suppose". Continuing, Sam noted: "the roading network feels like it is a place for cars I think, that's my view. Making it less friendly for traffic...would help to make people realise they are in a town, they are not on a motorway on Victoria Street". These comments also highlight a discourse that says roads are primarily for the use of cars and that they are unsafe for non-motorised traffic.

Despite calls from various quarters to make the city more activity-friendly by improving safety through such measures as more traffic calming and cycle lanes, some residents have reportedly been quick to criticise. Leanne recalled her response to a resident who felt lanes were not needed because of an obvious lack of cyclists on the roads:

'Well, you don't have cycle lanes and you don't have cyclists because it's not safe'. It's the same thing with the rest of active living; if you don't have an environment that says to people 'Come and do stuff' then people aren't going to come and do stuff.

In contrast, Don felt that cycling was "all good in the city", despite some "terrible accidents" and deaths. He added that "by and large cycling is not too bad" with some good cycling lanes now in place. Don cited a lack of driver respect for cyclists as the problem and advocated the use of courtesy campaigns, which, coincidently, have since been implemented.

Another influencing factor is that of conflicting priorities, which I highlighted earlier as an economic issue. Transit's traditional priorities have been to ensure the smooth movement of traffic. However, doing so in a cost effective manner can be at the cost of pedestrian and cyclist safety. I suggested that the extensive use of painted centre hatching also privileged motorised traffic flow at the expense of cyclists and

pedestrians, and that such monies may have been better spent on cycle lanes. There were, however, signs of a change in thinking about roads, as illustrated by Peter's comment:

In terms of urban design, a lot of the thinking now is that our road is public realm, it's public space, so what goes on in the roading corridors is just as important for pedestrians (and) public transport...it's not just about putting concrete down and ensuring the fastest circulation for vehicles.

Central government legislation also influenced safety in terms of speed limits. Although recent changes have allowed for speed restrictions in school areas, generally it is very difficult to achieve and involves possible road re-classification. Arguably, setting local speed limits is something for local authorities to do in consultation with its residents. Furthermore, strategies employed by other nations, such as the English 'HomeZone' or Dutch 'Woonerf', which re-configure streets and suburbs to enhance pedestrian street usage, may well work in certain Hamilton suburbs.

In various decision-making processes where safety was an issue, discourses of economic rationality were also evident. For example, 'Te Rapa straight' - a busy stretch of four-lane road in an industrial area - is an extremely dangerous road to cross for pedestrians, and the lack of pedestrian crossings (under – or over-passes) is likely to be due to cost considerations. Recently, cycle lanes were painted but the speed limit remains 60km/hr. While I do not have statistical evidence showing any variance in cyclist usage of this stretch of road since the painting of the lanes, as a regular user of this road I suggest there has been little change as I continue to observe few cyclists. In the meantime, perhaps to avoid danger, people appear to simply drive to the other side of the road instead of walk. A similar situation exists on Cobham Drive near the Hamilton Gardens, except the speed limit there is 80km/hr on a four-lane road. The need to move traffic quickly and efficiently seems to outweigh any considerations of safety for other potential road users. Despite some public petitions, and pleas from the manager of the Hamilton Gardens, demands for an over-bridge or under-pass to allow Hamilton East residents safe access to the gardens have been largely ignored. Sadly, it may take further deaths or serious injuries for Transit New Zealand, the managers of these roadways, to invest in adequate safety measures.

For some of the staff members the issue of engaging safely in active living was seen as a 'perception versus reality' barrier. As previously stated, the solution to this was thought to be providing people with good experiences. Leanne's view was that "the only way to change it is to get more people out there cycling, making drivers more aware of cyclists' existence and therefore more courteous towards them".

Getting more people to cycle was ironically seen as a way to change perceptions and promote active living, even though residents may initially be hesitant to try it out. The irony of this line of thought was not lost on Leanne:

...the perception or reality of the ability to partake in active living seems to be [an impediment]...the thing is that some of the perceptions are reality, sometimes it is dangerous to cycle on the roads.

Based on my own experiences, I concur with Leanne. I often feel like a minority, almost a nuisance, when riding my bicycle around Hamilton. As mentioned, I also feel that many roads are not wide enough or generally cycle-friendly, making me want to either ride quickly, on the pavement, or not at all. Regular surveys of residents' perceptions of safety would go a long way to addressing the seemingly privileged status of motor-vehicle use, and enhance opportunities for active travel.

To summarise, contrasting views about what constitutes a safe city for active travel may well lead to varying measures of safety and varying practices for ensuring safe travel around the city. It would be prudent for the HCC to conduct objective surveys to ensure minimal standards are achieved. Furthermore, the HCC could ensure efforts were made to portray cyclists and pedestrians as equally legitimate users of roadways, rather than 'alternative' users. These types of changes could help change the 'truths' about non-motorised road users, redressing the imbalances of privileged and marginalised status.

Surveillance

A different form of safety regularly featured in discussions about personal security, particularly the notion that residents should look out for one another. Peter noted that the "passive surveillance" of parks, where houses were built to overlook them, was considered good urban design practice, preferable to close-border fences which ended up as graffiti targets. Similarly, Don commented that, from a social well-

being standpoint, high wooden fences adjoining walkways were said to obscure "lines of visibility" or "observation lines", making them unsafe and preventing social interaction. While some people used the walkways for criminal activities, closing them off was seen as a knee-jerk reaction by some members of the public who were perhaps ignorant of their practical use. In general it was hoped that in future there would be a greater emphasis on the community surveillance of neighbourhood spaces and parks through urban design practices.

The discourses of community surveillance, as supported by various HCC staff members, could be considered a technology of power, encouraging residents to monitor their own, and others' conduct. Indeed, applying urban design principles that promote surveillance constitutes a form of governmentality, whereby 'responsible' citizens wilfully take part in the regulation of community behaviour. On the one hand, having 'open' and visible walkways, houses and other buildings may seem like a good idea. However, it brings to mind Foucault's concept of panopticism, a technique through which disciplinary power can function, employing surveillance to bring about 'internal training' and docility (McHoul & Grace, 1998). While this type of surveillance is usually employed to monitor employees, such as in the case of 18th century spinning entrepreneur Richard Arkwright's 'Cromford window' (Bragg, 2006), it can also be employed as a subtle urban design technique to ensure communities are self-regulatory.

There seems to have been a move away from open and visible homes and businesses in the past 10-15 years, with many house owners fortressing themselves in, and others choosing to live in gated communities. These moves have effects for street connectivity, aesthetics and, I believe, long-term physical activity behaviour. It was interesting to note that HCC staff who commented on personal safety felt that passive surveillance was a good thing, but they did not comment on the possible reasons why many residents erected high fences or lived in gated communities. It is possible that such residents dislike the power effects that visibility encourages. However, this type of 'fear flight' to gated communities can also function as a system of exclusion and actually facilitate avoidance, separation, and surveillance, impacting on residents' relationships with other people and environments (Low, 2003).

My interviewees expressed the opinion that negative perceptions of safety and surveillance played a key role in determining resident physical activity behaviour, but believed that these perceptions could be overcome by encouraging people to try various active experiences. For example, Leanne explained:

...we have also...done...*Transport Choices for Families*, where we have worked with 8 families (to) change their transport habits, trying to get families out there learning. Our idea is if we get families who don't normally cycle, learning that they can do a round trip, round the bridges they'll actually do more cycling, we have done follow up and found that most families either were very efficient at doing the cycling, or have done more cycling and they have got much more enthusiasm from their kids, the parents are saying: 'they really enjoyed it and want to do it more', so they are taking little trips cycling, so that's working in terms of changing people's attitudes.

While such strategies suggest positive change, it may be that the only time residents feel it is safe to be active is in weekend leisure time, when there are often fewer vehicles are on the road and people have more spare time. Staff comments gave me the impression that being active was something to try to commit to, despite some of the real or perceived barriers, and the main reasons to engage were for leisure, recreation and health.

Discourses of health and active living

In my interviews I asked staff members about their views on physical activity and active living to identify various ways of knowing. The interview responses indicated to me that health and active living were seen as appropriate areas for HCC to be involved in. For example, James indicated that it was a council responsibility to look for ways to "create a healthy society". This opinion was reinforced by James' suggestion that those councils that did not promote active living would be "left behind". Some of the factors that governed responses included personal views about physical activity, active living and health, scientific and statistical reasons for living an active life, and belief in the social and mental benefits of sport and physical activity, and I will provide examples of these factors in this section. Many of the views on active living and health seemed to be widely accepted without question, and

as an organisation, HCC seemed committed to the promotion of active lifestyles to its staff.

I found the HCC to be a good role model for promoting the values of active living in that they had their own staff travel plan and discouraged staff from driving to work. According to Leanne, only 38 per cent of staff drove to work as sole occupants, while the rest car-pooled, walked, cycled or used public transport. HCC does not provide any staff car parking but does have fleet bikes for staff to use. It seems that many of those who believe in the value of active transport and active living actually live close to the HCC building and could be seen as proof of the self-selection principle (Handy et al., 2006). In a similar vein, HCC has tried to encourage residents to do the same through involvement in the *BikeWise* week, and the *Transport Choices for Families* initiative. These initiatives illustrate the belief that experiences of active living will result in uptake.

Sport was seen as something to be nurtured and strongly supported for reasons of social capital and cohesion. Don explained that the lack of organised activity in Hamilton's poorer areas often led to young people congregating into gangs. To promote sport and active living the Community Development team helped organise community triathlons, tai chi, volleyball and soccer events, Kaumatua (Maori elder) Olympics, as well as programmes to help people eat well and stay active. Their focus was on the poorer communities, which aligns with the Health Promotion principle of focussing on equity. This team was also heavily involved in the Poets Corner state housing suburb-rejuvenation project in a particularly poor Hamilton neighbourhood. The project was described by Don as "an example of where we are looking at good urban design to be able to create a more healthy community, both physically and socially". He went on to say that a city should be judged and measured on the wellbeing of its most vulnerable, and that attending to social and economic deprivation is a priority and can help residents participate, both socially and economically, in their communities.

Although the interviewees were all passionate about, or at least supportive of the need to live an active life, personal views about responsibilities for being physically active varied. Leanne thought that personal responsibility was important but also that councils needed to provide facilities and a pleasant environment. Continuing, she noted that "Central government, if…they wish to have a healthy, happy community in New Zealand, need to support local government…in terms of

finding funding". Meanwhile, Don indicated that personal responsibility was the most important factor, commenting that "people need to be self-motivated to step up (and we should) focus on people being empowered". Don also thought that many individuals simply abdicated their responsibilities and ended up relying on the state, leading to welfare-dependency, irresponsible behaviour, and lack of attention to physical activity and personal health. Sam's comment that: "it is all about the person wanting to do it", was a popular perspective among HCC staff.

It is said that 'the personal is the political', suggesting personal beliefs and values play a key role in shaping actions on a political level. Therefore, the statements made by HCC staff members in the interviews reflect their personal views and, in the capacity of a local government employee, potentially impact on planning and decision-making with regard to their departmental roles. Therefore, attitudes towards personal responsibilities for physical activity, active living and health could translate into workplace biases and practices. However, in general interviewees' responses were mixed. Leanne's comment summed up the common view:

There are always going to be two extremes, there is always going to be the one person who, no matter how, they work ridiculous hours, they have a completely sedentary job, they have a lot of family commitments (and) they still find time to have an active lifestyle. There are going to be the other people at the other end of the scale who have been given absolutely every opportunity and don't take any of it. So some of it is always going to come down to the individual and taking responsibility for it but...everybody else's actions are going to influence that, to a certain degree.

The above comments reflect a general discourse of individualism, and an opinion that it is noble, responsible, even admirable to fit active living into a busy schedule, whatever a person's circumstances or the impacts on work/life balance. Furthermore, it implies that others seem to waste opportunities, making them remiss, negligent or irresponsible. The subtext seems to be that such people are 'choosing' not to do what is good for them, which may unnecessarily and avoidably cost other taxpayers money if the person becomes overweight, or develop a related condition such as diabetes. Healthiness was, therefore, constructed as something within each

individual, worthy of pre-occupation through the modification of lifestyle (Crawford, 1980), and "a potential, needful of release by virtue of engagement in certain behaviours or attitudes deemed 'promoting' of good health" (Lupton, 1995, p. 70).

The introduction of long term council community planning has reinforced the idea that local authorities should concern themselves with resident well-being. My interviews revealed that having a healthy and productive citizenry was a priority, for both central and local government, one that could be assisted by encouraging active living. Interestingly, in the interviewee responses, active living was not linked to any other benefits such as nature appreciation, social cohesion, or enjoyment, indicating a somewhat narrow view and the pervasive, dominant view that being active is useful primarily for health reasons. Therefore, the dominating discourses of health and active living had the effect of silencing or obscuring other equally valid discourses.

Most of the HCC staff felt that resident engagement in physical activity was a matter of personal responsibility and choice, indicating a belief that people owe it to fellow residents to be active for health reasons and that failing to do so is tantamount to wilful neglect. Therefore, a discourse of health and active living in local authority institutions that promotes ideas of personal responsibility and individual lifestyle choice encourages self-discipline and the regulation of bodies, further emphasising the operation of bio-power (Laurian, 2006). The following comments by James illustrate awareness, and a dominance of medical discourses of health and physical activity, which in turn support and promote self-discipline through the workings of bio-power:

I think we've seen over the last 10 to 15 years a rise in statistics. I think the DHB or DHBs or primary health care organisations have statistics that come through saying: well look, we're getting worse. The rise in healthy eating, healthy activity; DHBs are running strategies and forums around that kind of thing and I think there is a natural attrition to physical activity because the solution is around physical activity...I think it's only going to get bigger; the obesity issues are going to get bigger.

Since the 18th century, the population has become constructed as a social object liable to measurement, classification, analysis, and techniques of discipline, all aiming to increase the health, longevity, and productivity of a population (Bevir,

1999). James' reference to health statistics reflects such a widespread governmental desire to measure and 'know' populations. It also illustrates the rise of science and statistics and an increasing focus on health promotion, which can function to regulate individuals such as city residents, ensuring their bodies can remain fixed as objects of health (Fullagar, 2002). It was interesting to note that the science and statistics did not highlight for the interviewees environmental, political or economic problems, only personal behavioural ones.

Discourses of participative government

In addition to being asked about physical activity, all HCC staff members were questioned about the levels of consultation and collaboration required to fulfil their roles and how this impacted on their work. The responses revealed a high level of awareness of the need to facilitate both, but participants expressed varying opinions about the value of each and the degrees of commitment, from both HCC and outside agencies and stakeholders. This area highlighted the potential effects of a general discourse of participative government, a key component of which is the LTCCP. As mentioned in Chapter Five, commitment to community consultation and planning under the LTCCP is non-negotiable under the Local Government Act 2002. The main goal of the consultation process is to ensure councils act in ways that better reflect the needs of their constituents and involves agreeing on a set of outcomes and the formulation of action plans. The new strategic framework, and associated action plans and funding commitments, therefore reflect the desired community outcomes, which are then protected by the long term planning process.

Community consultation was portrayed as an often difficult exercise requiring patience, tact and skill, as there is often lack of agreement in the consultative process. This highlights the difficulty of securing community consensus and the communication challenge for Council staff. In reference to city residents becoming involved in complex council decisions, Leanne noted that "they don't see the problem in the holistic way that we do (so) they put pressure on Council, so as to put pressure on senior management, to say 'well, no!'". Residents can therefore put a stop to activities or expenditure they do not agree with. Commenting on the lack of local government responsiveness due to the consultative process, Leanne also noted that:

...things take a lot longer to come through because we're here to serve people, the community, and just because a small section of the community understands that the environment needs to be treated in one way doesn't mean the wider community does.

This suggests that council need to dedicate considerable time and resources to the task of persuasion, resulting in delays and a build up of jobs. Leanne goes on to say:

...you start thinking 'well now I have to prioritise it' [and] what tends to happen is well whatever community is shouting loudest about gets the priority because that is what the Council will be shouting about [and] that's what the management will then be going on to you about.

These comments indicate the conflicting nature of public consultation; it requires patient negotiation in terms of HCC proposals for action but also rapid response in terms of public demands. They also reinforce the concept of resident as 'customer' and the need to respond in a timely manner to meet their needs and provide 'value for money'.

Consultation, therefore, becomes a matter of educating the public in a diplomatic way to ensure good decisions are made on the basis of sound information. An example of this was the problem of trying to convince residents of the benefits of cycle lanes while many were claiming that they were not needed due to a lack of cyclists. Residents complained that painting cycle lanes would unnecessarily remove their on-street parking, thereby reducing property values. Commenting on the frustrating task of pleasing various groups, Sam stated: "Everybody says that they want more facilities for cyclists but nobody actually wants to be the one that has them on their road I suppose".

The NIMBY (Not-In-My-Back-Yard) attitude was reported to be pervasive, particularly when it came to acting on the identified community-desired outcomes. Many local residents voiced their objections not only for cycle lanes but also for lakeside walkways, playgrounds, skate bowls and park placements. These concerns were not always rational and residents' worst fears were often never realised. These types of issues were described by Mark as "a dynamic between a vocal minority of concerned residents and a minority of antisocial elements in the community", with the

HCC stuck in the middle. However, 'proper' consultation, planning and legal advice was noted as something that could set a precedent for future developments. Referring to a past difficulty in securing lakeside land from property owners in order to complete a community-desired walkway, Mark noted "at the time our boss said if we win on this one we are not going to lose on any other alongside the river". However, consultation was not always deemed problematic and the development of the *Social Well-being* strategy and the *Safer Routes to Schools* programme are examples of positively received and negotiated stakeholder consultation exercises.

Community consultation can be time-consuming and lead to only certain voices being heard. Interviewee responses indicated that, in terms of submissions, the 'community' often only constituted local interested parties, advocates and lobbyists. It is debateable whether this constitutes a fair representation of a wider community view. Furthermore, some staff members indicated that consultation requirements were excessive. Commenting on subdivision development Kevin explained:

...there is a lengthy process; public consultative process to identify land use...and all the obvious things like pipes, roads, reserves and how they interrelate. Creating an active walkway or cycleway network is part of that, and creating, or so we hope, legible roading patterns to serve as connectors where it is not practical to have walkways.

Continuing, Kevin added: "We just consult people to death".

Mark indicated the problem was sometimes one of "having a well-grounded view or understanding of what it is actually the community wants". For him, the consultation process sometimes resulted in mixed messages coming from members of the community or other stakeholders. Mark noted that popular community ideas about desired facilities or infrastructure did not necessarily translate into widespread community utilisation. He added that "action doesn't always follow belief". Some desired community outcomes are, therefore, desirable in principle but may reflect personal ideals and be less appealing upon consideration of the changes to the environment or personal behaviour needed. These various comments highlight some of the difficulties inherent in the consultation process. Problems can clearly arise in terms of how and when community consultation is undertaken, what sort of representation is present, what is deemed to constitute community, negotiating over-

zealous lobby groups or advocates, and ensuring decisions made are representative of wider community views and expert advice. Indeed, I sensed that there was some resentment that the consultation process sometimes prevented HCC from doing what they were employed and elected to do.

Resident reaction to the removal of on-street parking to make way for cycle lanes is an example of the type of public feedback and 'active citizenship' that may work against activity-friendly environments in the long-term. Furthermore, the requirement to consult with communities may cause ongoing problems in terms of negotiating conflicting views. The example of the Hamilton lake walkway shows how considerable resources are sometimes necessary to achieve the desired results. It may be that in the future legal battles will prevent investment in other activity-friendly initiatives. This may be especially so if certain types or groups of citizens, such as investors or private interest groups are disproportionately represented at meetings, or if the consultation process is flawed. In their case study of a city's sport stadium subsidy deliberations, Sam and Scherer (2006) noted how processes of public consultancy can evolve into matters of political expediency, suggesting the need for careful scrutiny to ensure fair and balanced outcomes.

The extent of HCC collaboration, both internal and external, varied but in general terms staff indicated that internal between-unit collaboration had improved markedly since the introduction of the strategic framework and the new planning processes. In some cases this had led to the breaking of new ground and unfamiliar engagement in discussions between staff members from disparate departments, such as Economic Development and Sustainable Development. Although this had resulted in some "head-butting" the general consensus was that this was beneficial for achieving community outcomes. My findings revealed that collaboration with central government agencies relevant to the promotion of population physical activity, such as SPARC and the local District Health Board, was minimal. This reinforces the need for coherent urban policy in New Zealand to integrate and coordinate activities (Zollner, 2004).

My findings revealed that collaborating with Transit New Zealand had been a problem in the past, but that both parties had signed up to the *Urban Design Protocol* and high level talks were now happening. However, some problems still existed and they may have been due to conflicting priorities. Kevin illustrated this point by referring to disagreements over pedestrian access over a busy Hamilton road:

"Cobham Drive is a state highway managed by Transit and they have got their criteria, and their criteria is to shift traffic". This criterion conflicts with HCC's desire to develop an integrated city network in that it prevents easy pedestrian and cyclist access to Hamilton Gardens, one of Hamilton's most popular attractions. This situation is an example of competing discourses, one of motorised traffic circulation primacy, and the other of accessible, well-connected facilities. As in the case of Te Rapa straight, economic rationality may be playing a part in the decision-making process.

Marinetto (2003) notes that community involvement in local government affairs is a relatively recent phenomenon but "now regarded as integral to good practice in policy circles" (p. 104). On the surface, this modern version of a liberal democratic trend seems to be an empowering one, but Marinetto (2003) notes that it originated when the Right sought "to achieve a balance between rights and duties" thereby helping to "reduce the burden of the state and introduce greater private sector provision of public goods (p. 107). Therefore, although the Local Government Act (2002) introduced the LTCCP to ensure local and regional authorities acted in ways that better reflected citizen needs, the end result may be an increase in the privatisation of areas formerly in the public domain, and a formal focus on the civic responsibilities of residents. These could both be considered examples of divesting public authority responsibilities and, as with the criticisms of health promotion (Coveney, 1998), could result in the development of a 'collective' subject, requiring ongoing self-reflexivity and self-regulation.

Using Foucault's concept of 'governmentality', Marinetto (2003) goes on to explain how active citizenship has been used by many Western central governments as a strategy to enable the state to govern more effectively. Active citizenship in the form of community consultation may therefore be illusory, and rather than empowering residents, constitutes a form of governing; a practice designed to regulate society (Marinetto, 2003). Residents may feel they have a real say in what happens locally, but the reality may be somewhat different.

In summary, my interview findings revealed that the interviewed staff members placed a great deal of importance on public consultation and widespread collaboration. This was the case mainly due to the LTCCP requirement to consult with residents prior to 'significant' decision-making, and a continued focus on implementing central government agency advice and protocols, while avoiding the

duplication of work. Their responses indicated that discourses of participative government were widespread and having effects. There were mixed opinions regarding the usefulness of extensive consultation in particular. Issues I identified were possible staff resentment due to the perception that their authority or expertise was being undermined by lay residents, and the possibility that the community participation in local government decision-making was leading to community self discipline and regulation.

Discourses of work efficiency

In Chapter Five I described HCC's relatively new strategic framework which was developed to guide action towards its 'Vibrant Hamilton' vision. The framework's three focus areas of directing development, integrating plans and policies, and communicating to stakeholders were well known to the staff members interviewed, and had strong 'buy-in'. This buy-in symbolised a discourse of concern for working effectively and efficiently. The interviewees were aware of the potential benefits to city residents and to themselves of working 'smarter' in order to better achieve the desired community outcomes. They were also aware that mistakes could have long-lasting effects and could reflect badly on them personally and organisationally. However, there were many legislative or regulatory factors, originating both in local and central government, which they believed impacted on their ability to work in this desired way. The most often mentioned factor was the council's development guide, the *District Plan*.

The *District Plan* was regularly cited as a document that heavily influenced, mostly in a negative way, the ability of staff to work efficiently and effectively. Implementing their own strategies, which were often based on central government and international 'best practice', was described as challenging. While the *District Plan* is designed to guide the complexities of city development, it was seen as quite incompatible with the new strategic framework. The *District Plan* was described as "permissive", "didactic" and very difficult to make changes to. In terms of any proposed changes, Peter commented that "It is just so painful, just the slightest word change needs to go through a horrendously slow variation, which seems preposterous in terms of the urgency at which a lot of development is happening". There was evidence of resigned frustration at having to work within this framework.

In general, staff members believed that there was a "mismatch" in terms of the aspirations of new strategies such as *CityScope* and the restrictive nature of the *District Plan*. Nevertheless, it was seen as normal practice for all parties to a development to refer to it. The completion of strategies such as *CityScope* provided a remit to apply for changes to the *District Plan*, but these variation processes could still take some considerable time to enact. This seems to have been a lesson learned the hard way following criticism of earlier Structure Planning, such as for the then new suburb of Rototuna, and of suburban developments under previous and versions of the *District Plan*.

In terms of the initial development of Rototuna, a relatively new suburb in north-east Hamilton, 'activity-friendly' design was mandated, but not strongly enough, and the outcome was development that did not necessarily adhere to the principles of good urban design, but did adhere to the principles of maximising sales. This was described by Kevin as a "public failure" because of HCC's inability to make strong demands on the developers. This applied to both residential and commercial developments with The Base – a large commercial shopping development on the northern outskirts of Hamilton - and The Warehouse being criticised as examples of poor design. These commercial developments were seen as not overly people-friendly in terms of access, public interaction, or in terms of the buildings 'addressing' the street, but they were nonetheless compliant with the *District Plan*.

The City Planning unit therefore identified that changes were needed and they decided to remove flaws from the *District Plan* and set up more directive rules to ensure future Structure Plans resulted in more integrated land and transport use. Making demands on developers is therefore likely to be easier in the future. However, in the meantime various measures, such as employing an eco-design advisor, launching the *Vista* City Design Guide, and forming an Urban Design panel, are being promoted in order to encourage and steer development. This situation reflects a sense of hope rather than belief that developers will cooperate, be creative, and look 'outside the box'.

Another area of comment that reflected a concern for working efficiently was that of HCC's hierarchical structure and integrated planning. Interviewees indicated that all their within-unit planning was framed by the hierarchical structures of the strategic framework and the LTCCP process. Although, in basic terms, this meant working towards the city Vision and satisfying the desired community outcomes, the

reality of application was considered complex. Kevin frustratingly noted: "I think one of the problems has been these overlapping layers of plans...there comes a time when you feel like you are doing the same job with a slightly different emphasis, again and again and again". Various purposive unit-specific plans and associated action plans, such as the *Recreation and Leisure Plan*, had either been 'shelved' or were required to be maintained in addition to new processes, such as the Activity Management Plans.

Not only were there issues in working with both old and new plans but also in operationalising the new integrated strategies. Leanne pointed out that:

...making sure we line our LTCCP up with our strategies...is very much more holistic, but...it is also so integrated it gets very complicated and, trying to draw a spider diagram of the eight strategies and where they all link up, you've got lines everywhere!

As a consequence staff often cited a 'capacity constraint' in terms of the Strategic Unit being able to cope with an ever-increasing workload. This pressure was due to increased structure planning, major infrastructure growth, staff time and capability constraints, leading to the staggered roll-out of the eight key strategies.

Despite this, there was an overwhelming support for the new concept of overarching strategies and multi-unit coordinated plans and actions reflecting the view that it would be complicated but worthwhile. There was general criticism of past organisational structuring which staff believed encouraged units to work with a 'silo' mentality. That is, projects were worked on in isolation and there was little information sharing between departments, or integrated planning. Staff members believed that the new frameworks would ensure better between-unit coordination and collaboration, pulling together what Leanne labelled "a lot of the stuff that's been quite ethereal in Council" and a reflection of "more enlightened thinking" by Council. These viewpoints illustrate how past systems of operation can become out-dated following reviews, new management trends or developments, or the introduction of new legislation. It also highlights the discontinuous nature of local government policies and activities.

The structure plan for the further development of the suburb of Rotokauri (see Appendix D) was cited by all interviewees as an example of the fruits of the new

comprehensive strategic approach. Structure plans for new 'growth cells' in the northwest and southwest of the city include many features of good urban and activity-friendly design, such as neighbourhood centres, good connectivity, and integrational transit planning. These features emphasize the creation of "finer-grained" pedestrian environments. The plans also revealed mutually supporting networks so that roads, cycle lanes, footpaths and storm water networks complemented one another in ecological terms.

A striking feature of many interviews was the use of business terminology and a business model to describe activities, which was perhaps a reflection of a similar emphasis at the organisational level. Like many private businesses, HCC has a Vision and Mission Statement (see Figure 5, p. 54), along with a set of in-house values to guide action. Interviewees spoke of a corporate strategy plan, of key stakeholders, and getting a return on investment out of other staff members. Council was even referred to as a business unit, indicating the move over time to a business model of operation. This feature reflected an acceptance, and maybe a public expectation, that a business model is appropriate for undertaking HCC work. Such a business model may well have implications for staff members and residents due in part to its potential influence on the expected roles and responsibilities of HCC, and also to the impact of supporting discourses of economic rationality.

The continuous push for improved or enhanced rationality through more integrated strategizing and planning, or the need to 'work smarter' can end up unduly delaying actions or emphasizing only certain types of action. Examples of this include the backlog of work and need to prioritize due to capacity constraints in certain departments, and the overt transition to business models of operation. Priorities for action may not include those sympathetic to active living and be based on whomever in the community are 'shouting the loudest'. Furthermore, business models of operation may suit for-profit organisations but not necessarily public authorities, which may result in tacit and token approval of environmental activity-friendly changes. An example of the latter is the preference of on-road to off-road cycle lanes for reasons of cost.

Underpinning discourses of work efficiency correlate with Weber's ideas on bureaucracy. A Weberian description of bureaucracy is that of a hierarchical organization designed rationally to coordinate the work of many individuals in the pursuit of large-scale administrative tasks and organizational goals (Fairclough,

1989). Weber believed that "the evolution of a rational but depersonalised system of bureaucracy is the characteristic feature of modern society and one of the alienating by-products of the spread of 'enlightened' practices" (McHoul & Grace, 1998, p. 62). In other words, he believed that bureaucracies were sources of power in their own right because of their abundance and because of depersonalising effects.

Evidence of this type of bureaucratic power was apparent in my interviews. All staff members reported feeling frustrated with the disconnections between some of the politicised administrative practices and the strategic goals that they generally supported. Administrative rationality, therefore, was an impediment to the implementation of the 'best practices' established through research and consultation. This type of barrier means that activity-friendly built environments may not always go ahead. Developments in Hamilton such as The Base at Te Rapa, and The Warehouse in the central city have been allowed to develop even though there were differences of opinion regarding design.

The sheer complexity of developing integrated strategies and plans, and the need to adhere to new legislation can be barriers to developing activity-friendly environments. My interviewees all noted that new ways of planning, duplication of effort, and consultation requirements were adding to workloads. Although their views about promoting active living through environmental change were generally positive, the reality of pushing through changes was quite different. This supports Weber's point that power lies within the institutional structure rather than with people who happen to work there, and that no specific person is in control of this power. I found that, in some instances, the systems, rules, plans and structures within HCC had 'a life of their own', making future decisions rather unpredictable. For example, although meetings, plans and strategies to revitalise the CBD and potentially open the city up to the river, making certain streets more pedestrian-friendly, have been in circulation since the 1970s, decisions and commitments continue to be re-shaped and revised.

The structures and formal rules that were set out on paper – such as the *District Plan* - seemed to 'govern' all decisions, and employees struggled with these rules when attempting to achieve the strategic goals specific to their roles. My research shows that, as Weber concluded, this type of bureaucracy, rather than always leading to efficiencies, can have the opposite effect and can be irrational and inefficient. Bevir (1999) notes that "institutions and the concepts on which they are based arise out of the more or less random interaction of numerous micro-practices"

(p. 352), emphasizing even further the possibilities for irrationality and unpredictability.

Foucault extends the idea of Weber's 'disciplining rational bureaucracies' by describing them as new 'mechanisms' of power in modern society, "concerned with the management and administration of 'life'" (McHoul & Grace, 1998, p. 62).

Therefore, bureaucracies not only constrain employee agency, and stifle and frustrate workers, they also concern themselves, albeit subtly and indirectly, with life processes, including physical activity behaviour. The important consideration here is what form these concerns take. Bureaucracies that strictly define or limit possibilities for active living, such as by commodifying leisure, may be detrimental to the goals of population physical activity promotion. Foucault emphasized the study of processes and activities within institutions and the ways that certain devices and policies regulate individuals via regimes of power (Bevir, 1999). While the HCC have the interests of residents and other stakeholders at heart, these residents are also subject to HCC's authority. This type of disciplinary authority can be devised to render resident behaviour stable and predictable (Fischer, 2003).

In summary, staff members supported the new strategic framework despite it having created more work and complexity and highlighted incompatibilities with the *District Plan*. They believed that the *Access Hamilton* and *CityScope* strategies were already making a difference with regard to roads and transport and structure planning. *Access Hamilton* was hailed as a strategy that would ensure consistent support for walking and cycling in Hamilton, having as one of its four main action areas the promotion of 'cycling and walking traffic'. There was criticism of past administrations but widespread optimism for the future and a belief that working effectively and efficiently within a strategic framework would be potentially beneficial for active living initiatives. However, problems existed in terms of the complexities of integrated planning, issues with the *District Plan*, and a strong business-like culture. The ideas of Foucault and Weber regarding bureaucracies and discontinuities help to highlight how institutions, such as the HCC, are depersonalised places and rarely predictable, meaning that well thought-out plans to promote active living may be very difficult to implement.

Summary

In this chapter I have detailed my findings by outlining various discourses and noting comments made by HCC staff members that reveal their extent and power. The discourses discussed have effects in the real world of local authority practice because they are instrumental in the 'making' of people, thereby anchoring these discourses in wider societal processes (Fischer, 2003). My analyses of the discourses of economic rationality, safety and surveillance, health and active living, participative government, and work efficiency emphasize the politically charged and socially constructed micropractices that influence local authority decisions. It is important to acknowledge these workings of power in that they contribute to decisions that shape built and social urban environments. This can make the job of influencing population physical activity an extremely complex one; an implication that I will elaborate on in my conclusions.

CHAPTER 7 – CONCLUSIONS

I began this thesis by quoting Aristotle, Smith and Foucault as a way of explaining what I believe are some of the most relevant and important ideas and factors for population physical activity research and practice; the governance of citizens, economic structure, and the regulation of populations. My interest in these topics guided the development of this thesis and helped to focus my research question, which aimed to discover the discourses underpinning local government planning, decision-making and action with regard to built and social environments for active living. In this chapter I describe my innovative approach in terms of methods and theory, outline how I answered my research question, review my findings, and underline how this study adds to the population physical activity body of knowledge.

At the beginning of this thesis I explained my interest in built and social urban environments and expressed my curiosity as to why some cities seem to place more importance on, and invest more heavily in efforts to promote active living. I also voiced my concern regarding research and practice that places so much emphasis on motivating people to change their lifestyles and become more active when so many elements in the social and built environment conspire against such a lifestyle.

Reflecting upon my past experiences also helped me focus on the factors that I believe are important for the promotion of active living. Through this process I came to the realisation that built and social environmental factors play a major part in shaping my physical activity behaviours, thus it seemed highly probable that they also play a part in other peoples' lives.

While research and interventions employing behaviour change techniques are interesting and worthwhile, I wanted to delve into those studies that had examined wider environmental influences on active living; such as street design, levels of connectivity or social cohesion. My literature review revealed this to be an expanding area of research and practice, much of which is based on social ecological or environmental approaches to behaviour change. A more holistic approach is, therefore, being taken by many, recognising the influence and interconnectedness of macro level, extra-individual factors. These studies resonated with me, despite the difficulties in establishing causality between environmental variables and physical activity behaviour.

In the U.S. and Australia initiatives such as *Active Living by Design* (Active Living by Design, 2007) and *Active by Design* (Heart Foundation of Australia, 2007) are focussing on changing these built and social environments, and SPARC (2007) recently released guidelines for creating activity-friendly environments in New Zealand. The recent release of World Health Organization guidelines (Edwards & Tsouros, 2006) to help local governments promote active living was further evidence of a change in focus. However, a gap in the research, one that could help me answer my initial question about variances in city practices, involved the examination of local government institutions that help to shape these environments.

Arguably, the delivery of social marketing guidelines promoting physical activity are not overly useful without a better understanding of how local governments plan and collaborate with other agencies and interested parties, and of the factors influencing their decisions. This would be akin to providing advice about diet and exercise to an individual without examining their immediate circumstances or environs. My reasons for undertaking this case study were to focus on a particular local government authority to uncover the various ways of talking, writing, and knowing in terms of built and social environments and active living. I hoped to gain valuable insights into the factors shaping HCC's decision-making and the implications for active living opportunities. Through the identification and examination of various discourses, I helped shed new light on the complex task of creating supportive environments and, in the process, crystallized my own thinking in terms of government, population control, market forces, health and active living.

I began this thesis by reviewing literature concerned with physical activity and active living. In particular, I examined literature from a broad range of disciplines including sport and exercise science, urban planning and social geography. Not only did this help me understand some of the trends in population physical activity research and practice, it also highlighted the aforementioned gap in the literature. It was here that I realised that, in a highly urbanised world, urban local government authorities play an integral role in supporting opportunities for active living and by studying how they operate we can better understand the task of facilitating these opportunities. Thus, I set out to examine the workings of a local government authority by analysing semi-structured interviews and publicly released printed texts. Employing a selection of Foucauldian 'tools' facilitated this task, enabling me to scrutinise established knowledge about population physical activity and local

authority governance, and approach the topic from a different angle in order to reveal new connections and enhance understanding.

After reviewing the key literature and becoming familiar with some of Foucault's ideas I formulated interview guides and selected city council documents, keeping in mind my research question and what I was hoping to discover. The interviews were informative and telling. I found the interviewees to be honest and open, which meant that I had rich data to analyse. I was also satisfied that I gathered relevant council documents for analysis because my interviewees made references to these texts throughout our discussions.

The next task was to analyse the data and discuss my findings, a task I found challenging due to the complex nature of Foucault's ideas and the difficulty of applying them in order to answer my research question. However, adopting Foucault's concepts was also very rewarding. I discovered specific themes, consisting of groups of statements, and identified the discourses that shaped them. Because power and knowledge are considered to be 'joined together' through discourse, I was able to suggest specific ways of knowing, identify certain 'truths', and comment on some power effects. I found that key, and often competing discourses of economic rationality, health and active living, and participative government worked to facilitate or constrain HCC activity in terms of creating supportive environments for active living by limiting what could be said. After considerable analysis and review I arrived at a number of key findings and conclusions, which helped to answer my research question.

In terms of the studies, theories and models discussed in my literature review, I found that the Hamilton City Council were engaged in many actions, and moving in a strategic direction consistent with the research recommendations. Their strategic framework emphasised a holistic, sustainable approach to shaping and supporting the 'urban fabric'. There was widespread recognition that past suburban development was too *ad hoc* and that better, more considered planning was needed for the future. Indeed, I found that structure planning and CBD redevelopment plans were all taking into account factors that influence active living.

However, my principal aim was to investigate discourses underpinning these activities to better understand, or even predict consequences for residents. My first key finding was that the Hamilton City Council produces, and is produced by discourses of economic rationality, a nurturing council, participative government,

health and active living, safety and surveillance, and work efficiency, which in turn are supported by certain ideas or rationalities. For example, in terms of health and active living, scientific findings and statistics with regard to physical activity, obesity and public health were well known to staff members, and helped to shape discourses of the ideal 'active citizen'. Having an active citizenry was seen as something the council could help bring about through such measures as cycle paths, adequate open spaces and by focussing on social matters such as employment and public safety.

Promoting opportunities for active living was, therefore, a way to increase social cohesion, reduce traffic congestion and, importantly, help ensure that city residents could remain or become healthy and productive members of the wider community. However, efforts to promote physical activity through environmental change may be critiqued for seeking to control populations, as was the case in the sanitation movement. Laurian (2006) suggests that efforts to enhance environments to promote physical activity may constitute a new 'moral environmentalism' and advocates a rationale based on ethical principles of sustainability, and social and environmental justice. From my research findings, I concur and believe such an approach would further enhance population physical activity efforts.

The utilitarian view of active living was also reinforced by pervasive discourses of economic rationality. On the one hand it was considered necessary to promote active living by focussing on environmental factors, yet discourses of economic rationality promoted the belief that individuals should pay for leisure and recreation opportunities in the future. Furthermore, this rationality promoted the notion that investment in built and social environmental changes should meet certain cost/benefit criteria. Discourses dominating the public realm, such as the neo-liberalist ideal of an unregulated free market economy, influenced council's decision making and action with regard to city development and active living initiatives by valuing developer investment and activity-friendly infrastructure in mostly economic terms. Here, my decision to analyse both HCC documents and staff member interviews helped to illustrate more fully the complex effects of the identified discourses. The circulation of various, often competing discourses, resulted in disconnections between ideals and practices. Whereas HCC ideals, values and priorities were reflected in the document texts, my interviews revealed competing discourses, particularly in terms of staff member beliefs and experiences dealing with residents and other stakeholders such as developers.

Discourses of a nurturing council, evident in HCC documents, emphasised a less traditional role for this local authority; one of caring for resident well-being in order to ensure health, productivity and wealth. These discourses had the potential effect of regulating and controlling behaviour through the process of normalisation and by defining citizenship in terms of utility. Discourses of participative government reinforced the importance of community consultation and collaboration to ensure the achievement of desired outcomes. However, my study found that such processes were often arduous and dubious in value. While serving to enhance perceptions of democracy, choice and freedom, community consultation can have a counterintuitive effect, often promoting indecision, regulation and control.

My identification of discourses of safety and surveillance highlighted curiously ambivalent personal views about 'alternative' road user safety, despite a focus on the facilitation of walking and cycling. The power effects of urban design principles were also evident, reflected in the favouring of surveillance-enhancing development (e.g., buildings that address the street, active road frontages, slow speed roads, and open, pedestrian friendly streets). Once again, this has a controlling effect by encouraging normalisation through the observation of fellow residents. A similar normalising gaze was apparent among HCC staff. In particular discourses of work efficiency emphasised the value of strategic, integrated and coordinated approaches to governance, based on plans, strategies and other rules of operation. However, my interviews highlighted the fragility of decision-making and actions - aligning with Weber's ideas on bureaucracy - and emphasised the discontinuous nature of local government activity. Importantly, HCC strategies, plans and actions are reflective of these discourses, illustrating wider societal preoccupations with, and concerns about, physical inactivity, obesity, citizenship, economic success, 'democratic' practices, and efficiency.

Secondly, my research emphasises the contingent nature of local government activities, which has implications for active living. I found examples of council plans, based on central government research, being influenced by factors outside their control. The introduction of central government legislation and differing priorities of other organisations impacted on decision making, meaning that the consequences for residents were unpredictable. By examining staff members' micro environments and practices I found that in many instances their abilities to act were shaped less by strategic decision-making and more by factors outside of the HCC control (e.g.,

central government policy changes, resident concerns, developer priorities). Therefore, although resources were poured into strategy development for the purposes of enhancing the city living experience, the realisation of such outcomes was dependent on unforeseen events and decisions. Only by examining past events were interviewees able to explain the reasons for action or inaction, and the consequences for active living. The implication is that modernist research, such as the body of work that was used to develop the New Zealand *Urban Design Protocol*, will not necessarily help to resolve the problem of inactivity due to the myriad of possible contingencies, and the ideal of the active citizen may remain illusive.

Furthermore, city residents, as subjects, are contingent products of sets of techniques of government and technologies of self discipline (Foucault, 1991). In terms of the Hamilton City Council these techniques of government are embodied in the strategic framework which is designed to guide all planning and action. My study showed how such strategizing could be considered a form of 'governmentality', aiming to shape, guide or affect the conduct of others via detailed planning mechanisms, while at the same time 'totalizing' and 'individualizing' (Gordon, 1991) with the effect of normalising certain behaviours. Even though there was no explicit mention made of a desire to normalise, I found that documents emphasizing active travel and other 'correct' ways of behaving, and interviews detailing efforts to transform 'wayward' or less fortunate citizens, promoted this effect.

Thirdly, techniques of local governance and the contingent nature of council actions highlight the complexities of enhancing environments to promote active living. The research examining the relationships between built and social environments and active living does not normally consider the feasibility or practicality or ease of enhancing the relevant influencing factors. Therefore, while central government advice, based on international research, continues to guide local government, such modernist belief in societal betterment continues to overlook such factors as employee values and beliefs, developer's primary concerns, and varied resident reaction to local government plans. These factors are shaped by discourses, many of which I have identified in my study.

I have also illustrated the complexity of shaping environments to promote active living through the examination of the workings of power. Foucault (1982) noted that modern power "applies itself to everyday life which categorizes the individual, marks him by his own individuality, attaches him to his own identity,

[and] imposes a law of truth on him" (p. 212). This somewhat inescapable force of power can affect behaviour through the actions of local government authorities via circulating discourses. It is through the construction of various truths that discourses have their power. I have shown how discourses about traffic congestion and circulation, active transport, the role of a city council, the purpose of physical activity, and effects of urban design all bring with them consequences for active living.

Not only did I find that discourses had powerful effects through the privileging of certain truths, they also had effects by excluding other possible truths. My last finding is that the circulation and maintenance of certain discourses have the effect of obscuring or silencing other equally valid discourses. The 'truth' that public consultation is an imperative in all planning that potentially impacts on the lives of Hamilton's residents can be a barrier to decision-making and even prevent council acting on central government research based advice. Furthermore, the truth that shaping environments to promote active living is good for the health of Hamilton's citizenry excludes or marginalises the focus on non-health related reasons for being active, such as for social interaction, pleasure, or to improve road safety. Goals that involve the shaping of environments to develop a more active, and healthier, population appear positive, but it is important to consider motives and techniques of both private and public organisations, made evident through discourses, to expose the complex workings of power and illuminate unintended consequences.

Through this study I have highlighted the potential of taking population physical activity studies in a relatively new direction through the examination of urban local authorities via a Foucauldian lens. I have answered my research question and have revealed interesting avenues for further investigation. By examining local authority texts and staff member interviews I have also developed a better appreciation of some of the disconnections between strategic intentionality and action.

This research has prompted me to consider, reflect upon and review my own thoughts about population physical activity and the role of local government authorities. While I recognise the value, and am supportive of attempts to modify environmental factors to make it easier for people to be active, I now appreciate the complex task of doing so. I suggest future population physical activity research in this area could benefit from employing theory, such as Foucauldian discourse analysis, to capture these nuances and complexities.

APPENDICES

APPENDIX A – Interview guides

Parks, Recreation and Leisure - Interview Guidelines

Preamble

My name is Tony Ryks and this interview is being conducted as part of my research project entitled "Supportive environments for active living?: A case study of local government processes, practices and collaborations". I believe that urban built environments, including parks, gardens and playgrounds, play an important role in enabling active living. Broadly speaking, I define active living as a way of life in which physical activity experiences are valued and integrated into daily living.

Strategies, plans, guidelines and philosophies

What specific strategies, plans, or policies in your department target physical activity, active living, sport, leisure, or recreation in some way? What general goals do they specify? (Was the Open Space Strategy ever developed?)

Has the Recreation & Leisure plan been reviewed since 2002? What were the outcomes of the review?

Was the Recreational Walkway and Cycleway strategy ever completed?

What are council guidelines for establishing and maintaining parks, gardens, playgrounds, river paths, historical and cultural landmarks (any formulae? Playground within 500m and walkway within 500m, playing field per 2000 residents), and how have these changed over the years? Why does council provide them at all?

What is council's philosophy regarding the connection of neighbourhood parks and paths with homes? (Is there a cohesive system in place? Are there connector paths in newer subdivisions, including gated communities?)

What strategies does Council have for making parks safe (eg: edges of parks to run along streets, or houses adjacent to or overlooking parks)?

How do your planning strategies, guidelines and processes address the impact on residents' ability to engage in physical activity? (eg: Do you use health, social, or environmental impact assessments?)

What do you know about HCC's Active Communities strategy? What is it?

How do city zoning, land use, or general urban design policies impact on parks and gardens activities?

How do transportation and roading policies impact on parks and gardens activities?

Processes and practice

How are walking and cycling routes that pass through parks and open spaces marked to reflect they are part of a larger network?

What safeguards are in place to prevent future administrations from abandoning active living commitments?

Is there a register of open/green space size, and/or number of trees under council care? Is there a strategy for the maintenance of certain levels/numbers of green space/trees?

Trees were to be protected under the Recreation & Leisure plan, why did this not occur with the trees on Grey Street that were recently felled by developers?

What are the plans for Garden Place, Hamilton's only real town square or mall? Are there any plans to make squares or malls more commonplace in any development?

Does Council have any plans to expand the Community gardens to more areas of the city, especially higher density areas?

Does council have any plans for drinking fountains or safe bicycle parking facilities for parks, especially the larger ones such as the Lake Domain?

What do you think are the major influences on or impediments to promoting supportive environments and infrastructure for active living?

What or who are the major influences on your ability to provide active living support? (e.g.; central government policies or directives, community feedback, research, economic growth requirements, funding, lobbying by interest groups)

What part, if any does politics play in parks, gardens or reserves procurement, maintenance or development?

Outcomes

One of the goals of the Recreation & Leisure plan was: "More of our community is demonstrably more physically active". Has this been measured? How was this done?

Which commercial organisations are now successfully delivering recreation and leisure opportunities using Council administered facilities?

How does Council measure resident satisfaction with the parks?

The city has over 1000 hectares of open space, which is the lowest total area of the largest 8 cities in NZ, and less than half of Dunedin's 2225 hectares. Why is the goal of 8 hectares per 1000 residents thought to be adequate?

Do you feel the provision of more open spaces guarantees usage? Do you monitor park usage in ways other than resident's surveys? Do spatial properties or purpose designed open spaces feature when planning new open spaces?

How does the LTCCP community and stakeholder consultation process influence decision-making regarding matters that could influence active living?

What have been some of the major successes in removing barriers to physical activity since the introduction of the Recreation & Leisure plan?

Promotion

How are parks and open spaces and active recreation promoted in Hamilton?

What are your strategies for promoting green spaces to ensure equal and easy access to them? (ie: parks and gardens within walking distance from dwellings)

How does the council set a good example with regard to active living? (how does it encourage staff to walk, cycle or use public transport, and deter vehicle dependency?)

Parks and open spaces have been found to be associated with walking for transportation but not with walking for recreation. Why do you think this could be so? Have you found the results to differ for Hamilton?

The attractiveness of the neighbourhood environment is associated with overall activity and recreational walking. Does Council conduct surveys of city aesthetics? Are there implications for Parks & Gardens?

Funding and economic considerations

What priorities or hierarchies determine funding or other decisions that may impact on active living support?

Does Parks and Recreation tap into national funding for active living initiatives, such as funding for improving air quality through green spaces?

When purchasing land for reserves does council pay at a reduced rate because of a requirement to build reserves, or does it pay market rate to developers?

Collaboration and co-ordination

Which other departments, agencies or stakeholders do you work with to plan initiatives in the area of active living? (eg: Cycle Action Waikato [CAW], or Living Streets Aotearoa) Do they have any influence on decision-making?

What considerations are made to incorporate aspects of active living into as many department initiatives and practices as possible?

Is the amount of green space tied in with any other plans or goals such as sustainability goals or carboNZero?

How does parks and gardens work towards conservation of native bush and gullies?

Does Parks and Recreation work with Community Development staff, including Neighbourhood Development Officers to plan, promote, and co-ordinate events?

'Partnerships' was a key theme in the last Recreation & Leisure plan. What internal or other partnerships have been developed since 2002 and what have been the success/failure stories?

Responsibility for promotion and support for active living

Where do you see responsibility for active living and physical activity lying, mostly at personal level, local government, public health, central government, or other areas?

Planning and Urban Design - Interview Guidelines

Preamble

My name is Tony Ryks and this interview is being conducted as part of my research project entitled "Supportive environments for active living?: A case study of local government processes, practices and collaborations". I believe that urban built environments play an important role in facilitating and enabling active living. Broadly speaking, I define active living as a way of life in which physical activity experiences are valued and integrated into daily living.

Strategies, plans, guidelines and philosophies

What specific strategies, plans, or policies in your department have a focus on physical activity or active living, and what goals or standards do they specify?

How do your planning strategies, guidelines or processes address the impact on residents' ability to engage in physical activity? (eg: Do you use health, social, or environmental impact assessments?)

Does the Council follow closely the Urban Design Protocol? If so, how have you interpreted the recommendations regarding the effects of design on health?

What are Councils strategies on building density, urban growth boundaries, and business centre nodes? How will they impact on physical activity?

What considerations are made to incorporate aspects of active living into as many department initiatives and practices as possible?

How does CityScope support active living or physical activity? Does this strategy have specific objectives for active living?

What do you know about HCC's Active Communities strategy? What is it?

What or who are the major influences on your ability to provide active living support? (central government policies or directives, community feedback, research, economic growth requirements, funding, lobbying by interest groups?)

What are Council's policies on connectivity, establishment of suburban nodes, or the importance of local destinations in terms of urban or suburban design?

What strategies are in place to prevent suburban living 'islands' such as gated communities and subdivisions that have few entries/exits, and little connectivity?

What steps has the Council taken to curb or counter the negative effects on connectivity of funnelling traffic onto arterial roads?

Research has shown that longer vehicle trips occur in less mixed neighbourhoods. Are there policies regarding both horizontal and vertical land use mixing? Are there plans to change land use mix policies?

Are there any planned local by-laws that could impact positively or negatively on physical activity? (eg: Central and accessible stairwells in all new or refurbished buildings)

Are there any plans for Hamilton City to join the Healthy Cities movement set up by WHO in the mid 1980s?

How do planners strategize about active leisure and recreation, and active transport planning? Do you consult with Parks and Leisure, and Roads and Transportation?

Processes and practice

What are Council's attitudes towards New Urbanism or Smartgrowth? If supportive, then how is this put into practice with regards to active living and physical activity?

Do protocols for land use and development take into account impacts on non-motorized transport, in terms of accessibility to places of interest?

How does the council set a good example with regard to active living? (how does it encourage staff to walk, cycle or use public transport, and deter vehicle dependency?)

What do you think are the major influences on or impediments to promoting supportive environments and infrastructure for active living?

Infrastructure retro-fitting is costly. What is Council doing to minimise or prevent this type of work in relation to urban design supportive of active living?

Has any research been undertaken to discover the most walk-able and cycle-able neighbourhoods in Hamilton? If residents want to live in these places because of ease of non-motorized travel, is this evidence enough to warrant widespread adoption?

Has council carried out research regarding population and living density, trip length or mode of trip?

Some people who value active living, including the ability to walk or cycle to nearby places for work, shopping or play, choose to live in areas where this can be realised. Has council carried out research on self selection of place of residence?

The Base shopping development is close to housing in Pukete and St Andrews, and Rotokauri, but there is no good cycle or pedestrian access. Why was this not a requirement for the developers?

What safeguards are in place to prevent future zoning mismatches, such as Riverlea?

Does Council investigate resident's perceptions of the built environment? How does it respond to these survey responses? (eg: Ugly building nominations)

How do planners address matters of safety in terms of pedestrians and cyclists? (Street lighting guidelines, footpath width, etc)

Outcomes

What safeguards are in place to prevent future administrations from abandoning active living commitments?

How does the LTCCP community and stakeholder consultation process influence decision-making regarding matter that could influence active living?

The density and variety of use in a neighbourhood determine the functional distances that separate places of work, living, and play. What measures are in place to counter some of the negative effects of urban sprawl?

What influence, if any, can developers have on walking and cycling behaviour through infrastructure developments?

Is there an 'ideal' density for Hamilton city, or for various zones within the city?

Promotion

How is the CityScope vision for Hamilton urban design communicated to residents?

Funding and economic considerations

What priorities or hierarchies determine funding or other decisions that may impact on active living support?

How does your department reconcile the differences between developer interests and sound urban planning practice?

Collaboration and co-ordination

What communications take place between planners and Public Health officials, and in what regard? (Just in terms of sanitation, fluoridation and the like, or about physical activity as well?)

Which other departments, agencies or stakeholders do you work with to plan initiatives in the area of active living? (eg: CAW, or Living Streets Aotearoa) Do they have any influence on decision-making?

Responsibility for promotion and support for active living

Where do you see responsibility for active living and physical activity lying, mostly at personal level, local government, public health, central government, or other areas?

Community Development - Interview Guidelines

Preamble

My name is Tony Ryks and this interview is being conducted as part of my research project entitled "Supportive environments for active living?: A case study of local government processes, practices and collaborations". I believe that social capital, connectedness and cohesion, play an important role in facilitating and enabling active living. Broadly speaking, I define active living as a way of life in which physical activity experiences are valued and integrated into daily living.

Strategies, plans, guidelines and philosophies

What specific strategies, plans, or policies in your department have a focus on physical activity, active living, sport, leisure, or recreation, and what goals do they specify?

How do your planning strategies, guidelines or processes address the impact on residents' ability to engage in physical activity? (eg: Do you use health, social, or environmental impact assessments?)

What considerations are made to incorporate aspects of active living into as many department initiatives and practices as possible?

Does the council have a strategy to develop vibrant, participatory communities?

What do you know about HCC's Active Communities strategy? What is it?

Processes and practice

How does the council support diversity and multiculturalism in ways that promote active living?

How do you ensure that all residents have equal opportunities to participate in sport and physical recreation programmes? (consideration given to sex, age, race, income level, or ability?)

Do you conduct equity reviews to ensure residents have equal opportunity to participate in sport and physical recreation programmes, regardless of sex, age, race, income level or ability?

What initiatives does Community Development facilitate to promote neighbourliness or community spirit in each suburb?

How do you engage with communities prior to the approval of significant developments that impact on active living?

What is the process, if any, for liaising with children or young people when planning new development areas or urban renewal projects?

How does your department seek and consider community input into design features that encourage active transport such as walk to school groups (walking buses), disability access groups, or bicycle user groups?

What or who are the major influences on your ability to provide active living support? (central government policies or directives, community feedback, research, economic growth requirements, funding, lobbying by interest groups?)

How does the LTCCP community and stakeholder consultation process influence decision-making regarding matter that could influence active living? What do you think are the major influences on or impediments to promoting supportive environments and infrastructure for active living?

How does the council set a good example with regard to active living? (how does it encourage staff to walk, cycle or use public transport, and deter vehicle dependency?)

Do councils run workshops to look at issues, problems, or phenomena from various perspectives, thereby providing differing points of view and giving a more holistic account of human behaviour and living?

How do you connect affordable housing and active living opportunities?

Outcomes

What safeguards are in place to prevent future administrations from abandoning active living commitments?

Promotion

How do you promote the development of public spaces that accommodate community events and cultural development programs, such as walking and discussion groups, local arts or other festivals or events?

What special events or initiatives that involve physical activity and engage all social groups do you sponsor or support in some way?

How do you support sports, active living, or cultural organisations? Do you partner with them in programmes that aim to build social cohesion and build opportunities for physical activity?

Funding and economic considerations

What priorities or hierarchies determine funding or other decisions that may impact on active living support?

Collaboration and co-ordination

In what ways do you work with Hamilton Creative Arts Council or others to incorporate high quality community art programs into public spaces and buildings?

Do you work with other departments on developments that get people together, such as community gardens?

Which other departments, agencies or stakeholders do you work with to plan initiatives in the area of active living? (eg: CAW, or Living Streets Aotearoa) Do they have any influence on decision-making?

How do you work with other departments and agencies to promote safe, secure and crime free neighbourhoods? Do you support neighbourhood watch groups?

Responsibility for promotion and support for active living

Where do you see responsibility for active living and physical activity lying, mostly at personal level, local government, public health, central government, or other areas?

Roads and Transportation - Interview Guidelines

Preamble

My name is Tony Ryks and this interview is being conducted as part of my research project entitled "Supportive environments for active living?: A case study of local government processes, practices and collaborations". I believe that urban built environments, including road and transportation systems, play an important role in enabling active living. Broadly speaking, I define active living as a way of life in which physical activity experiences are valued and integrated into daily living.

Strategies, plans, guidelines and philosophies

What specific strategies, plans, or policies in your department have a focus on physical activity or active living, and what goals do they specify?

What strategies, if any, are being employed to encourage cycling in Hamilton?

How do your planning strategies, guidelines or processes address the impact on residents' ability to engage in physical activity? (eg: Do you use health, social, or environmental impact assessments?)

What considerations are made to incorporate aspects of active living into as many department initiatives and practices as possible?

Has council any strategies or plans to make driving more difficult or expensive, especially for shorter urban trips?

Are there new protocols in place to ensure that cyclist room is considered when considering all road designs, intersections or road-markings? Can these protocols be back-dated for retro-fitting?

What long-term commitments have been made to enhance the safety, speed, and convenience of cycling?

Does Council use the *Getting there*, on foot – by bicycle, National Transport Strategy, or Neighbourhood Accessibility Planning documents when planning or designing roads or intersections?

What plans are in place to create an integrated network of cycling and walking routes linking connector roads to local destinations and points of interest?

Do you have a dedicated Safer Routes co-ordinator within the Transport Department? Are you using the Cycle network and route planning Guide issued by Land Transport?

What do you know about HCC's Active Communities strategy? What is it?

Are there any plans for automobile-free zones in the city, such as the one-way system touted for Victoria Street some time ago? Are there plans to re-introduce cycle room on the Whitiora Bridge? Are there plans to install bicycle facilities in the city centre? Will the owners of the new building by the Claudelands Bridge be creating an access way for cyclists, as was previously the case?

Processes and practice

What or who are the major influences on your ability to provide active living support? (e.g.: central government policies or directives, community feedback, research, economic growth requirements, funding, lobbying by interest groups?)

What do you think are the major influences on or impediments to promoting supportive environments and infrastructure for active living?

How does the council set a good example with regard to active living? (how does it encourage staff to walk, cycle or use public transport, and deter vehicle dependency?)

What safeguards are in place to prevent future administrations from abandoning active living commitments?

How do your activities facilitate equitable access to walking and cycling and reduce vehicle dependency?

What are the pre-requisites that need to be satisfied before cycle lanes can be established? (Are there council documents outlining these, or do you use the road hierarchies system?)

Studies have shown that cycling can help achieve national physical activity targets. Do you use SPARC's Activity Friendly Environments document to consider ways to achieve this for Hamilton residents?

Cycle lane construction seems somewhat inconsistent, for example Clyde street and Ruakura Roads, but not Knighton Road, which was re-sealed recently. Why the inconsistency?

How do the 'rules' regarding cycle lanes compare to those for other road markings such as cross-hatching or parking? (Why does cross-hatching or parking exist on wide roads while there are no cycle lanes?)

Do you monitor urban accidents involving pedestrians or cyclists? If so, what strategies are in place to minimise these? (Does council have any plans for education campaigns to promote driver safety with regard to cyclists and pedestrians?)

Do you monitor general vehicular congestion, and pollution? If so, what strategies are in place to combat these?

Does Council conduct travel surveys? What happens with this information and are there any resident travel goals, such as percentage of short trips not undertaken by vehicle? Do you measure connectivity or walkability for pedestrians and cyclists?

What are the criteria for the installation of vehicle calming measures or the imposition of speed limits? Are they proactive or preventive in nature or reactive following concerns or incidents?

How does the LTCCP community and stakeholder consultation process influence decision-making regarding matter that could influence active living?

Outcomes

According to a Land Transport research report only 10 per cent of Waikato residents cycle regularly. What goals, if any, does your department set in terms of cycling frequency in Hamilton?

How do you currently measure cyclist and pedestrian satisfaction, if at all, and what happens as a result of the measurements?

Promotion

Recent promotion has targeted cycle safety by highlighting the need for cycle lighting. Are any other cycling or walking promotional campaigns planned?

Anecdotally, cyclist safety seems to be a commonly cited reason for not cycling, or not allowing children to cycle. Are there any plans to educate drivers about cyclists, or to restrict vehicle travel in order to privilege cycle travel?

Are there any plans to promote cycle use for everyday purposes than just for recreational purposes, as seems to be the case at the moment?

Could environmental cues (e.g.: cycle lanes, signage, car-free/bike-privilege zones) of various forms be utilised to promote cycle use for other than recreational purposes?

Funding and economic considerations

What priorities or hierarchies determine funding or other decisions that may impact on active living support?

How do you identify and tap into available local or national funding for active living initiatives? (Such as programmes to enhance public transport through MOT/LTSA)

Collaboration and co-ordination

Which other departments, agencies or stakeholders do you work with to plan initiatives in the area of active living? (eg: CAW, or Living Streets Aotearoa) Do they have any influence on decision-making?

What relationship, if any, does your department have with health agencies such as MOH, Waikato DHB, Physical Activity and Nutrition Inter-agency Network (PANINI), or the National Heart Foundation?

How does your department work with the likes of Urban Planning and Sustainable Development departments to create supportive environments for cyclists and pedestrians?

Responsibility for promotion and support for active living

Where do you see responsibility for active living and physical activity lying? (e.g.: mostly at personal level, local government, public health, central government, or other areas?)

Strategic and Sustainable Development - Interview Guidelines

Preamble

My name is Tony Ryks and this interview is being conducted as part of my research project entitled "Supportive environments for active living?: A case study of local government processes, practices and collaborations". I believe that urban built environments play an important role in facilitating and enabling active living. Broadly speaking, I define active living as a way of life in which physical activity experiences are valued and integrated into daily living.

Strategies, plans, guidelines and philosophies

What specific strategies, plans, or policies in your department have a focus on physical activity, active living, sport, leisure, or recreation, and what goals do they specify?

Local Agenda 21 is currently under review. Can you tell me which aspects are being reviewed and how they may impact on active living? How do you, or Strategic, ensure all units implement Agenda 21 under the guidelines of the Strategic Plan?

How do the Sustainability Indicators take into account physical activity or active living?

At what stage is the Environmental Action Plan review at? Will there be a focus on active transport or active living in general?

How do your planning strategies, guidelines or processes address the impact on residents' ability to engage in physical activity? (eg: Do you use health, social, or environmental impact assessments?)

What strategies do you have in place to allow for growth as a city while managing the demand for energy and limiting the damage to our environment? How does physical activity and active living fit in here?

The city of Tauranga has embraced SmartGrowth philosophies as a way to manage growth in a sustainable manner. Did HCC consider this also? What was the outcome?

Does the *National Energy Efficiency and Conservation Strategy* (NEECS) suggest ways that local councils can support active living? How?

What do you know about HCC's Active Communities strategy? What is it?

HCC is committed to responsible energy management and will, wherever possible, reduce its dependence on fossil fuels through the use of renewable energy source. Does your department classify humans as a renewable source of energy, and if so how is this reflected in strategies for active transport or other relevant areas relating to physical activity?

Driving short walkable or cycleable distances could be considered wasteful. What strategies, if any, are in place to promote active transport and deter motorized transport for short trips?

89.5 per cent of households in Hamilton have one or more motor vehicles, and nearly half have two or more motor vehicles according to a 2001 survey. Also, a low proportion of Hamilton residents aged 15 years or over catch a bus to work (1.5 per cent for Hamilton compared to 3 per cent nationally, 7.6per cent for Auckland and 12.8 per cent for Wellington). How is your department working to increase active transport levels, including public transport? Do you conduct any surveys yourselves or have any goals in this regard?

Processes and practice

How does the council set a good example with regard to active living? (how does it encourage staff to walk, cycle or use public transport, and deter vehicle dependency?)

What safeguards are in place to prevent future administrations from abandoning active living commitments?

How does the LTCCP community and stakeholder consultation process influence decision-making regarding matter that could influence active living?

What considerations are made to incorporate aspects of active living into as many department initiatives and practices as possible?

Sustainable development programmes of action at central government level require a focus on *energy* and *sustainable cities*, among other factors. How do you operationalise actions in these two areas with regard to physical activity and active living?

How does your department strategize, plan or develop goals relating to physical activity in support of carboNZero?

How does the sustainability department apply the catch-phrase 'think global, act local' to the promotion of physical activity and active living?

Sustainable development involves balancing the relationships between social, economic, and environmental spheres of activity. What can you tell me about the interrelationships and dynamics of these spheres of activity for Hamilton city, and how could these dynamics impact on active living?

Do you conduct sustainability audits on urban and suburban built environment development plans? What powers do you have to require changes to meet standards, if indeed there are any?

Are you involved in the social development of children and young people as part of an effort to build a sustainable city? How do you achieve this and is physical activity and active living incorporated in any way?

How does your department work towards the environmental wellbeing of Hamilton communities, as required by the Local Govt Act 2002? To what degree to you focus on resident health through physical activity and active living?

As a cyclist I am always encountering broken glass on the roads and footpaths, leading to punctures and other dangers. Are there plans to introduce or subsidise the development of a glass recycling plant with refunds for returns?

Outcomes

The Sustainable Environment Team takes an innovative and proactive approach to initiate and facilitate action to protect the environment and promote sustainability. Since its establishment, what sustainable outcomes have been achieved with a focus on active living or physical activity?

Promotion

What do you think are the major influences on or impediments to promoting supportive environments and infrastructure for active living?

Funding and economic considerations

What priorities or hierarchies determine funding or other decisions that may impact on active living support?

Can or do you access funding from EECA or other agencies to help support non-motorized transport or other initiatives that support active living?

Collaboration and co-ordination

Your department develops partnerships with communities, the education sector, business, youth, Maori, planners, engineers, designers and developers, and other HCC colleagues. Where do your activities have the most and least impact?

How does your department take an integrated approach towards building a sustainable city, in terms of other departments and agencies?

What or who are the major influences on your ability to provide active living support? (e.g.: central government policies or directives, community feedback, research, economic growth requirements, funding, lobbying by interest groups?)

Which other departments, agencies or stakeholders do you work with to plan initiatives in the area of active living? (eg: CAW, or Living Streets Aotearoa) Do they have any influence on decision-making?

HCC seems to have a strong focus on creating areas conducive to physical activity for leisure and recreation, but not so much for active transport and social connectivity. How is your department working to address this apparent imbalance?

Tell me about the Sustainable Business Network and their activities? Are their interests simply the reduction of waste and production costs, and more efficient operations, or are they interested in human fitness and well-being too?

Responsibility for promotion and support for active living

Where do you see responsibility for active living and physical activity lying, mostly at personal level, local government, public health, central government, or other areas?

Active Communities Strategy - Interview Guidelines

Please tell me what the Active Communities strategy is.

How did the strategy come about?

What policies, plans or strategies informed the development of the Active Communities strategy?

How will the strategy be operationalised?

Will there be a specific person driving the strategy?

How will the strategy work with the other 7 strategies?

What funding will be in place to ensure the strategy is adequately supported?

Under strand A: Investing in our People, the strategic framework for the City explains that the vision is to build a city that celebrates diversity, building strong communities. There is no specific mention of promoting activity as a priority. Will this be changed at some point?

In the list of points detailing how the council intends to invest in the people the only mention of physical activity is in the statement: Helping to create a dynamic lifestyle environment through recreation and leisure opportunities. This is only one aspect of an active community. Will this strategy incorporate aspects of active transport or incorporating activity into other facets such as creativity, identity or CityScope?

When do anticipate completing the strategy?

Do you know if the results of the walk-ability and cycle-ability audits are known? Will the data from the Safer Routes Project inform the Active Communities strategy?

Why the focus on active communities now? (What have been the major influencing factors leading to this focus? E.g.: health, safety of cycling or walking, accessibility?)

Is there a vision for the Active Communities strategy?

Interview Guidelines - Questions for all participants

Strategies and plans

What specific strategies, plans, or policies in your department have a focus on physical activity, active living, sport, leisure, or recreation, and what goals do they specify?

How do your planning strategies, guidelines or processes address the impact on residents' ability to engage in physical activity? (eg: Do you use health, social, or environmental impact assessments?)

What considerations are made to incorporate aspects of active living into as many department initiatives and practices as possible?

Decision-making process

How does the LTCCP community and stakeholder consultation process influence decision-making regarding matter that could influence active living?

Collaboration and co-ordination

Which other departments, agencies or stakeholders do you work with to plan initiatives in the area of active living? (eg: CAW, or Living Streets Aotearoa) Do they have any influence on decision-making?

Active Communities Strategy

What do you know about HCC's Active Communities strategy? What is it?

Continuity

What safeguards are in place to prevent future administrations from abandoning active living commitments?

Commitment

How does the council set a good example with regard to active living? (how does it encourage staff to walk, cycle or use public transport, and deter vehicle dependency?)

Barriers

What do you think are the major influences on your abilities to act to promote supportive environments and infrastructure for active living?

What priorities or hierarchies determine funding or other decisions that may impact on active living support?

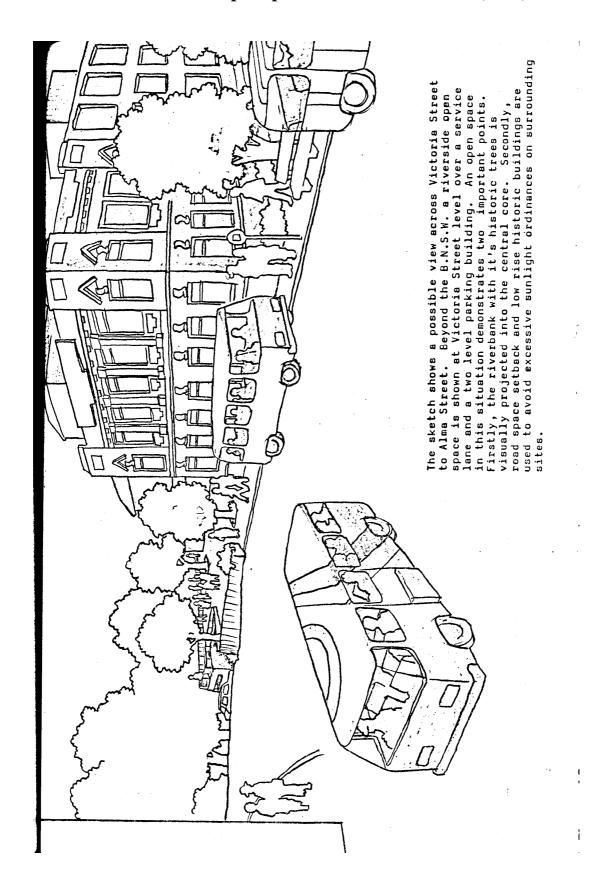
Responsibility for promotion and support for active living

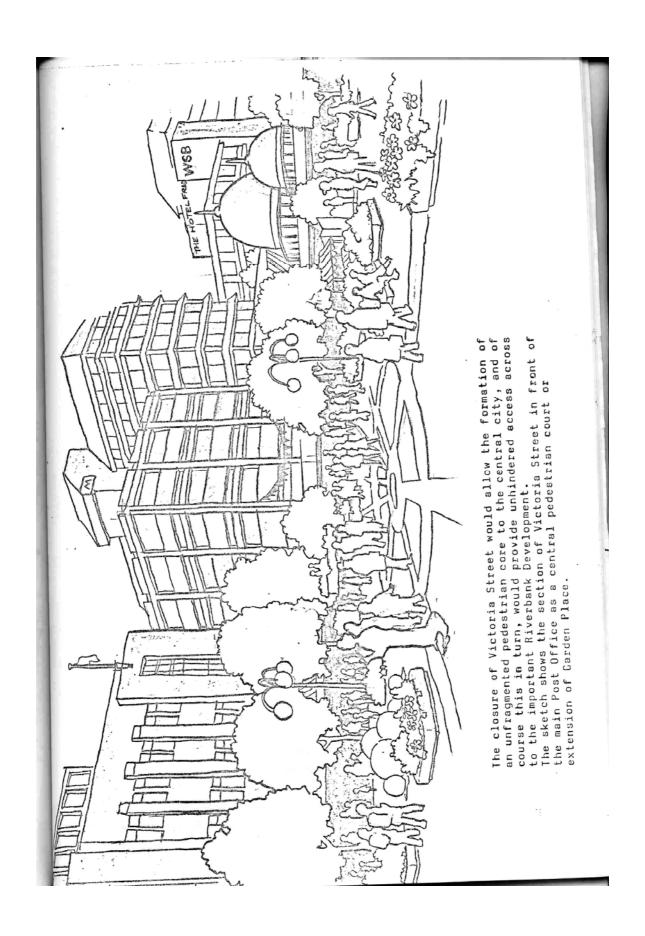
Where do you see responsibility for active living and physical activity lying, mostly at personal level, local government, public health, central government, or other areas?

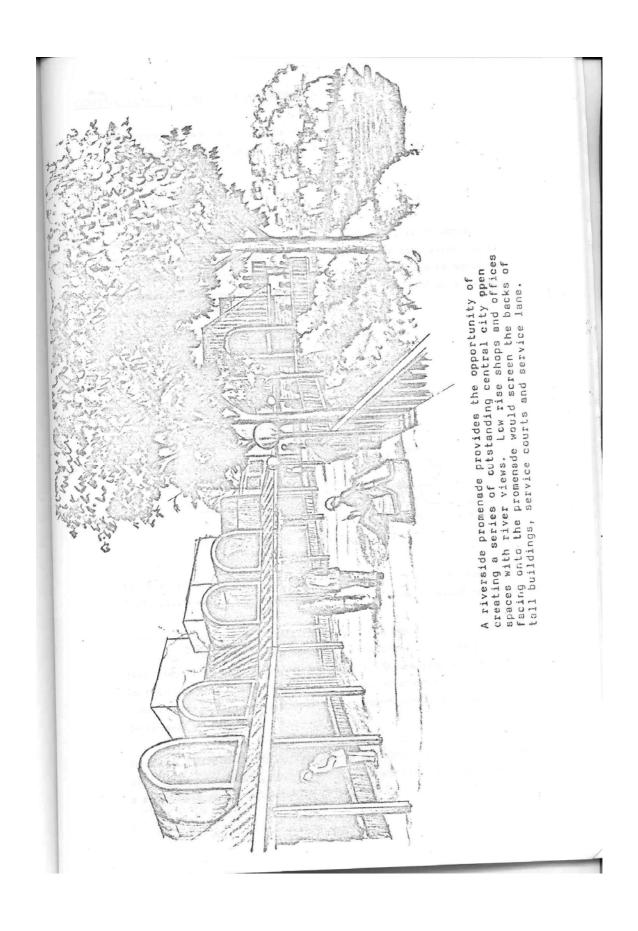
Influences on active living

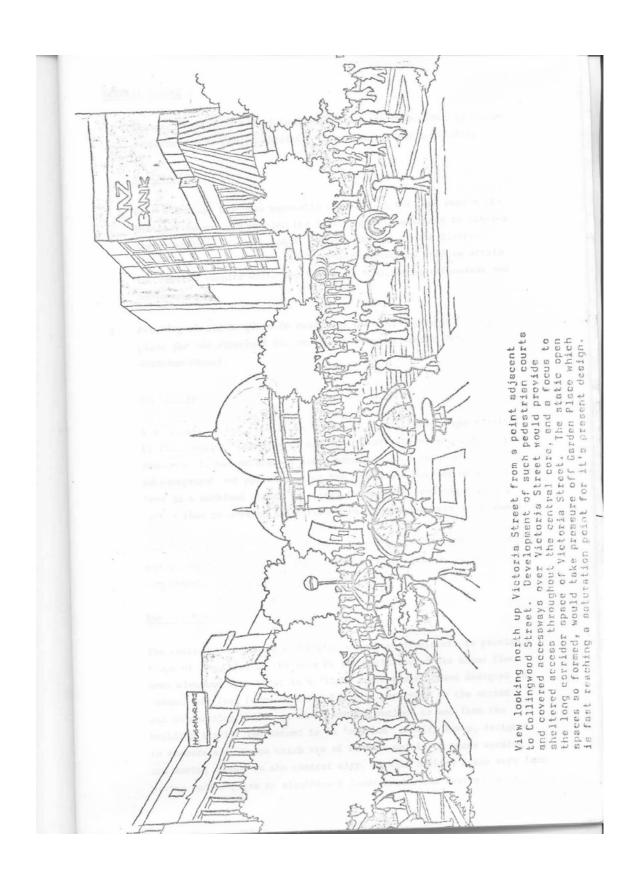
What or who are the major influences on your ability to provide active living support, central government policies or directives, community feedback, research, economic growth requirements, funding, lobbying by interest groups?

APPENDIX B – Open spaces in Hamilton's CBD (1980)

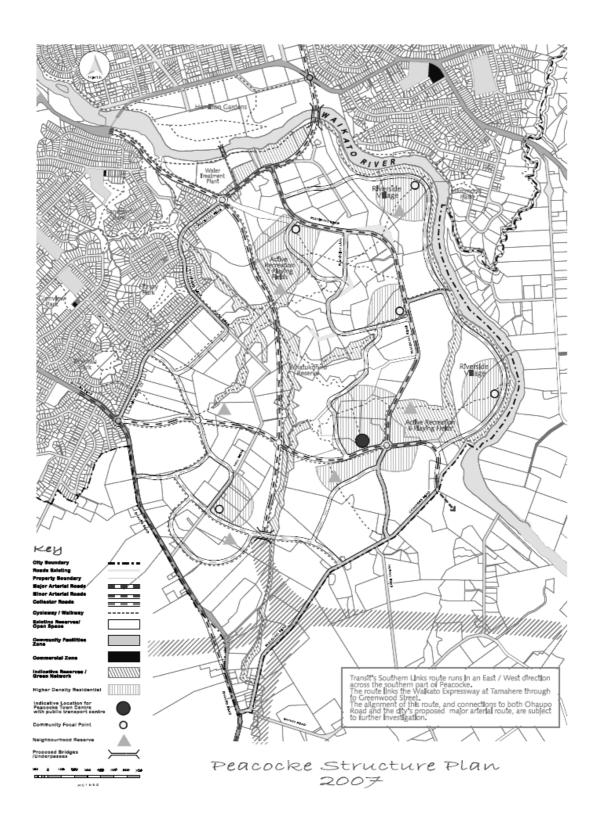




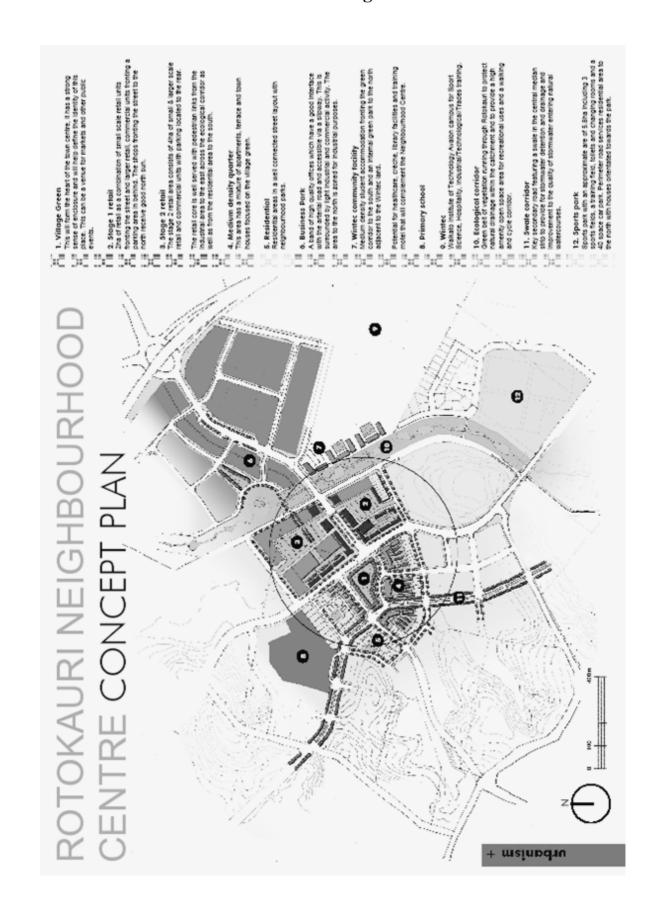




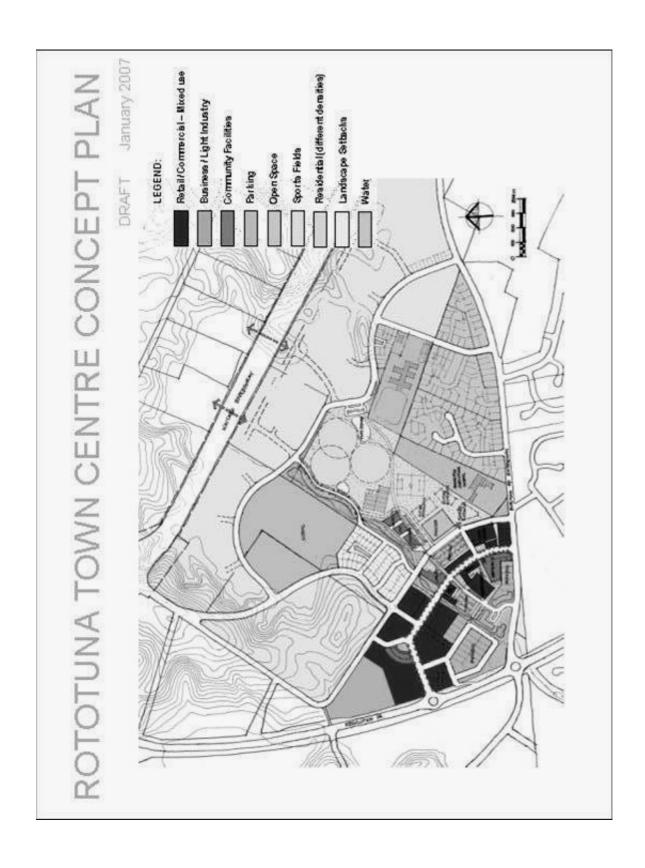
APPENDIX C – Peacocke Structure Plan



APPENDIX D - Rotokauri neighbourhood centre



APPENDIX E - Rototuna town centre



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